THE

Journal of the American Medical Association.

EDITED UNDER THE DIRECTION OF THE BOARD OF TRUSTEES.

PUBLISHED WEEKLY.

VOL. XIII. CHICAGO, DECEMBER 7, 1889. No. 23.

ADDRESSES.

THE AMERICAN ACADEMY OF MEDICINE;

OBSTACLES TO THE GENERAL ADOPTION OF THE PRINCIPLES OF THE ACADEMY.

Address of the President delivered at the Annual Meeting in Chicago, Ills., Nov. 13, 1889.

BY LEARTUS CONNOR, A.M., M.D.,

OF DETROIT, MICH.

(*Concluded from page 762.*)

We are compelled to admit the existence of another side of the picture. There are numerous serious obstacles to the rapid adoption by the medical colleges of a high grade of preliminary requirements from their students. Among these we note a few:

1. According to statistics collected by the late President Barnard, of Columbia College, it appears that, the proportion of literary college students has diminished during the past fifty years from 1 in 2,000 of the entire population to 1 in 2,500. During these fifty years the population has increased about fourfold; the number of colleges threefold, but the aggregate number of students in all the colleges but little more than twofold. The causes that have thus diminished absolutely the number of bachelors of arts we cannot discuss, but the fact exhibits one reason why more bachelors of arts are not found in the medical profession, and why a high degree of preliminary requirement is not generally regarded as necessary for entering upon the study of medicine. Significant of the continuance of this tendency of the age is the election of Ex-Mayor Low, of Brooklyn, N. Y., to the presidency of Columbia College. That a wealthy and successful business man, an able and astute politician with no practical training in the art of teaching, should be placed at the head of one of the most prominent literary colleges of the United States, is certainly a spectacle worthy of the most careful study. Has business so absorbed the best brain of the land, that from its ranks must be chosen the leaders of the intellectual and moral training of the country? If so, then we have to meet an obstacle of the first magnitude in the prosecution of our work. In any event we are a part of that protest which every scholar must utter against any and every capitulation of intellectual and moral life to commercialism. At every turn we shall be opposed by the trade spirit of our country and our time. This trade spirit cripples the efforts of not a few members of this Academy. One of our distinguished members in his labors said that he was most discouraged by some of those having abilities refusing to attempt certain work because it would not aid in filling their offices with patients, and their pocket-books with dollars. Recognizing our foe, we shall not be surprised at his unexpected and unwelcome presence, but be ever prepared to do what we can to thwart his purposes.

2. It is an historic fact that the medical colleges have constituted a powerful obstacle to an increase of the preliminary requirements. The history of the profession of Ontario fully substantiates our proposition. The colleges there were finally compelled to yield, as at last they must in the United States. This action of the medical colleges is based upon the trade aspect of their work. Adequate preliminary education, if exacted by all colleges, would reduce the sum total of student's fees, and other perquisites. The exaction by one school having no other advantages than its rival, of a high admission examination, would send a portion of its students to its rival. So in a variety of ways the principles of the Academy antagonize the trade interests of the medical colleges. Hence we can understand the efforts they put forth to defeat the enactment of laws adequate for the certain enforcement of an honest efficient preliminary examination and rational college training. That which has been made public is probably only a tithe of the antagonism already existing. Dr. P. H. Millard in the report already referred to, says "that only those who by their official position have been compelled to enforce the medical Acts of Minnesota, Illinois, Missouri, West Virginia, etc., can appreciate the obstacles and intolerable embarrassments encountered in their execution. The most captious criticism and formidable opposition came from the profession itself. This criticism and opposition did not come from the narrow minded cynic alone, but to the shame and disgrace of the profession, from a large number

of our medical institutions, some of which, we regret to mention, were manned by men of eminence and great learning, but had carelessly for financial reasons, given cognizance to an opposition to a reform which was entitled to the undivided support and encouragement from every member of the profession from the Atlantic to the Pacific. Of the nine attempts, to repeal the present Minnesota Practice Acts, at the last session of the Legislature of Minnesota, a majority of the professed amendments emanated directly from the medical colleges themselves." The evidence is overwhelming of the open and covert opposition of the mass of medical colleges to all enactments tending to limit the numbers of their students, and among these must be classed a proper preliminary education. They love large classes better than small ones. Reforms that will benefit their individual interests they will adopt, all others must receive their condemnation.

Many years ago the speaker attempted to persuade a member of this Academy, known the world over for his great learning, splendid abilities and apparent devotion to the advancement of the medical profession, to exert his influence with his own college to establish a preliminary examination, and a three years' graded course. He listened to me patiently, and when my plea was finished, he said: "My dear doctor, I believe in the absolute truth of what you say. By no other means can medicine be properly taught. For more than two score years I have said to myself as I finished my course of lectures, 'another farce ended.'" But he said, placing his hand upon his pocket-book, "the real trouble lies just here. The doing as you suggest by my college would diminish its income and the salaries of its teachers. We cannot do it." He did not do it, nor has his college done it to this day. I suspect that it never will do it until it can be shown to pay in money.

Admitting this hostility of the majority of medical colleges to the principles of the Academy what can it do in the matter? Its collective wisdom can most wisely answer this question, but it would seem evident, that the members of the Academy could cast their influence with such colleges as honestly did enforce an adequate preliminary examination. It could also assist in the enactment of such State laws as will compel all colleges whose diplomas are recognized within its borders, to enforce proper preliminary training. In one or both of these ways it might finally be made profitable for the hostile colleges to join in the vigorous prosecution of our work.

3. It is unfortunate, for the cause of preliminary education, that so large a proportion of the professors in medical schools fail to possess the training needful for the acquisition of the degree of A. B. Not possessing this training they are unable to comprehend its value to their students, and so are little likely to encourage them to obtain it. Naturally they oppose the requiring by their college of a higher general education than they individually possessed. They became professors, because of the fact that they had money or push to invest in the business enterprise, which was to enable the professors to distance all their competitors in the profession. Those who were not taken in gathered together of the remaining doctors in the town those having the most money, and push to the end that they might make as large an impression as their rivals, and so get as much or more business, and so make as much or more money, and so attain as extended a notoriety. It is beyond a question that most of American medical colleges originated in one of the two ways mentioned. From this origin it is clear that the general education of the professors was the least important item. Some were organized in other and less mercenary ways, others have outgrown the character with which they were born, so that there are medical colleges whose teachers are all that could be desired. Doubtless the remainder will be changed with the natural progress of events. It might be helpful in promoting this change if the exact number of bachelors of art among the professors could be ascertained and published to the profession and the laity. We cheerfully admit that many excellent practitioners and able teachers are found, among the professors of medical colleges, without the degree of bachelor of arts, men who have supplied by later studies the deficiencies of their youth. These are men of commanding abilities and indomitable energy who would have conquered all obstacles in any calling. But others in large number exist whose early defects have not been rectified in this manner, and whose presence in the lecture room of the college is an offence to any well educated, well bred person.

4. The lukewarmness of so many members of the Academy is another obstacle to the effective prosecution of our work. Those not members, notice and comment upon this state of things. They see members teaching in medical colleges which maintain no preliminary examination; they see members taking students under their direction who have the merest smattering of general knowledge; they observe at the yearly meetings of the Academy only two or three score members present; they rarely, if ever hear members speak of the Academy and comment upon it to the physicians about them; in all these respects they differ little, if at all, from non-members of the Academy. True, the Academy has ever had a remnant to whose faithful services it owes its continued existence. The remedy for this state of things is for each member to arise and enter upon his proper duties as a disciple and preacher of the doctrine of the advancement of general education in the medical profession.

5. Lastly, our greatest obstacle is the extensive general ignorance throughout the medical profession. I had collected verbatim letters illustrating the degree of this ignorance, but from lack of time I will not read them. Nor can I dwell upon the prevalence of this ignorance. It is everywhere apparent to the annoyance of the well educated. Medical editors, secretaries of medical societies, and all having large correspondence with the profession, tell the same story of the constant exhibition of a vast amount of actual illiteracy among members of the medical profession. It is a humiliating fact, that the medical journals having the largest circulation are those who cater to this illiteracy. An editor himself, a man of general and special culture, in response to my expression of wonder that he could have any connection with a medical journal of this class said: "I know well this element in the profession. It regards a really good medical journal as a 'kid glove' affair fit only for the 'aristocrats.'" They will not take, nor will they read such a journal. Hence, it is better to make a far inferior journal that they will take and read. This, he said, is the reason for the existence of those medical journals so offensive to the really intelligent practitioner. He then gave me the following picture of such subscribers as he had found them. "The typical doctor of this sort spends much of his time gossiping in the saloon or in the grocery. His office is as dirty and unkempt as himself. While there, his favorite posture is to sit in an old greasy chair with his feet upon an old dirty, dilapidated table. With an old pipe in his mouth he puffs and spits about his pen, removing his pipe only as necessary for conversation to his patient. When the mood takes him he writes to his medical journal. With lead pencil, and a piece of brown wrapping paper, he gives expression to his ideas, in language and forms quite unknown in classical English." All will admit that the presence of such men in the profession constitutes a formidable obstacle to the work of the Academy. To limit additions to their ranks is one of the ends sought by the Academy.

. . . . . .

Since our last meeting the Academy has lost several of its members by their journeying to that country which persistently receives and never returns its visitors. Preëminent among these, was Dr. J. L. Cabel, for fifty-two years a teacher in the University of Virginia. During this entire period he was known as the typical gentleman of culture and refinement, the teacher of living medicine, able to inspire his pupils with that enthusiasm imperative for attaining the best results; the learned scholar who from time to time gave of his labor for the benefit of his fellows, freely, fully and without price; the professor whose councils aided in establishing and maintaining a sound system of training for medical students, a system peculiar to the University of Virginia; a sanitarian high in the councils of his fellows; not to particularize further a man typical of the best development of his race. Like a ripe sheaf he was gathered to his fathers when his life had been fully rounded out. Last January I wrote, asking him to assume the duties of chairman of the committee on new members. I knew that his name would carry great weight among both old and young, in all groups of physicians in every portion of the land. Almost by return mail I received a long letter from him, explaining in detail that for some years he had been compelled to forego the pleasure of engaging in such work, though often solicited by gentlemen whom he specifically mentioned. He said that he wrote thus in detail lest the Academy might think that he desired to shirk any duty to the profession he loved so well, or to the Academy whose principles had been his life long standard. Had his physical condition admitted, he said this service to the Academy would have been performed with the greatest delight. As President of the Academy, I responded to this touching letter in terms such as would have sprung from the heart of any member. To this he replied on February 1, thus: "I have this moment received your very kind letter of the 29th ult., and I cannot resist the impulse to tell you how much gratified and touched I am by your generous expressions of sympathy and regard, not to speak of your too flattering estimate of the little work I have done with a view to the elevation of the standard of medical education, and to the furtherance of all enterprises looking to the improvement of our common profession."

Dr. Stephen Weeks, of Orange, N. J., one of the early members of the Academy, and Dr. William Elmer, of Brighton, N. J., have also passed to the unknown shores. The first was born in 1813, and the other in 1814. Both came of stock distinguished for its culture, and largely impregnated with the pursuit of medicine. Dr. Elmer was formerly a Vice-President of the Academy. We also note the deaths of Dr. Theodore I. Wing, of Susquehanna, Pa.; Dr. James Foultes, of Oakland, Cal.; Dr. James Kerr, of York, Pa., and Dr. J. I. Miner, of Wilkesbarre, Pa.

Our meetings are marked with two acts typical of human life. We record the admission into our ranks of members, and we note the passage of others from our ranks into the land of the majority. We remain between this advancing and retiring column in which narrow space we complete our work. In full view of these, let us ponder the problems before us, decide upon our line of action, and joyfully march to the conflict. As physicians, we are bound to cherish and keep bright the golden thread of professional truth, honor, and progress, which connects us with the

portion of our army already passed beyond our ken, that when we join it, a still brighter thread will be left to guide those following us. As men we will ever exhibit a manly independence and kindly affection toward all, so that when our turn comes to join the departed throng we shall do so with the consciousness that we have done what we could for the uplifting of our fellows and the ennobling of our race.

ORIGINAL ARTICLES.

INTESTINAL DISEASE OF CHILDREN DURING HOT WEATHER.

Read in the Section of Diseases of Children, at the Fortieth Annual Meeting of the American Medical Association, June, 1889.

BY PETER HOOPER, A.M., M.D.,
OF PHILADELPHIA, PA.

The causes of intestinal diseases in hot weather are mainly heat, impure air and improper food. Heat alone is evidently not the sole cause of intestinal diseases of children in hot weather, for relatively these diseases are more prevalent in the city than in the country. Still, heat is a potent factor, and I will consider this first.

The local abstraction of heat from the bodies of children suffering from entero-colitis or gastro-enteritis, I have always found to be productive of good. The use of cold water and cracked ice internally is also beneficial. Cold water compresses or the ice-bag applied to the head will reduce fever, and whenever I have used it there has been an improvement in the diarrhœa also. Since gastro-enteritis is chiefly a disease of hot weather, our object should be to lower the temperature, and this can be done by the keeping of large pieces of ice in the sick-room. The following case came under my care June 12, 1887:

H. S., aged 8 months. When I first called to see the child he had been sick for two weeks. Measles and gastro-enteritis was the history given to me on my first visit. I found the little patient in almost incessant convulsions, with rapid breathing, the pulse quick and jerking, the carotids strongly pulsating, the pupils contracted, the sphincters relaxed, and having very thin fæcal evacuations. The temperature in the axilla registered 109⅘° F. The treatment was the immediate use of the cold pack. Ice was rubbed down the spine and a block of ice was placed under the neck. In half an hour the temperature had fallen to 105° F., nothing being given internally. I directed that, during my absence, the same treatment be continued whenever there was any rise in the temperature. Chronic entero-colitis of several weeks' duration followed. During this time I continued the use of ice and ice-cold water externally and internally, and calomel, pepsin, bromide, bismuth and quinine suppositories were given whenever they were indicated. The mother kept the child out of doors in the cool air and shade a great deal of the time. This she was able to do by going to the old family homestead, which had shady grounds and an unobstructed exposure a great distance in front of the house.

The principal infant foods were badly digested, and no improvement was made until cow's milk was given, peptonized at first and afterwards pure, being obtained from a farm near by. In October of the same year, while the child was still under treatment, hip-joint disease developed, which was cured by deep massage and inunctions of lanoline. Chorea next developed and remains to this day. Excepting this disease the child is healthy and well nourished. In this case the free use of ice and ice-water, both externally and internally, was always followed by the reduction of fever and improvement of the diarrhœa.

The internal use of cold water given freely is very often beneficial. The vomiting is often increased at first, but this does good by washing out the stomach. Afterwards a sedative effect is produced, which is a valuable step gained in that food and medicines are better borne. The use of cold drinks and cold applications is good in entero-colitis and gastro-enteritis.

In entero-colitis the fæcal evacuations may be nearly uniform, or they may change in color at different times. They contain altered epithelium cells, partly digested casein, and sometimes mucus or mucus streaked with blood. Besides the free use of cold water or ice internally and externally it is good to use enemata of tepid water or medicated water to wash out the lower bowel. Enemata are useful when the movements contain mucus with or without blood. By this means the colon is washed out. Their benefit is limited, however, for the tepid or medicated clysters can not go beyond the ileo-cæcal valve, and often the small intestines are the seat of most of the inflammation.

I have not enough experience with washing out the stomach to say much for or against it. I have known of deaths occurring while one or both of these treatments were being used. In the last stages, when collapse is present, I hardly think they are admissible.

In cholera infantum, when the child has the characteristic stools, viz: an acid, greenish-yellow fluid containing lumps of undigested food and casein, and, later on, evacuations similar to the discharges of Asiatic cholera, absolute rest of body and abstinence from food for twelve or fourteen hours are indicated. During this time plenty of cold water to drink or a piece of ice to suck or swallow, if the child is old enough.

Impure air is also one of the causes of intestinal diseases of children in hot weather. The first three years of my practice in Philadelphia I attended, during the summer months, a great many children suffering with intestinal diseases in one

of the poor sections of the city. The sanitary condition of the houses and neighborhood was deplorable. The water-closets were filled to overflowing, the streets were dirty, and decaying portions of vegetables were exposed to the heat of the sun. As a result of this impure air the death-rate was very high, and could only be lowered by getting the parents to take their sick children to some free sanitarium from day to day.

The use of improper food is another cause of intestinal diseases in hot weather. The mother's milk is the proper food for children. It is, however, exceptional for a mother to be able to nurse a child the entire first year of its life, so that a resort to other foods is wholly or in part a necessity. I have almost abandoned the use of milk foods. It has been my experience that children using them do not grow so strong, muscular or so rapidly as they should. When the mother's milk fails, or when it is possible to nurse the child only in part, my preference is for sterilized milk. Cow's milk, due to the handling it undergoes, is apt to disagree with children in hot weather; but when it is given sterilized, intestinal diseases are much less frequent. In some cases no dilution of the milk is necessary, as I have known many children fed on cow's milk from birth and it agrees well with them when obtained fresh. I attend one large family of children who are fed in this way, and none of them have ever suffered with intestinal diseases.

Prophylaxis.—In intestinal diseases of children prophylaxis is very important. Give the child plenty of cool, fresh air, without exposure to the intense heat of the sun. Sunshine in moderation is beneficial, as it develops the red blood corpuscles and prevents anæmia. The advantages of sunshine are seen in both the vegetable and animal kingdoms. According to Dalton, the tadpole requires nine months in the shade to change to a frog, whereas in the sunshine it takes but three. The dress is important also. Flannels should be worn all the year round, and a thin abdominal bandage day and night. The child should be bathed morning and night, kept as cool as possible during the heat of the day, and have cold water to drink and cold sponge baths to the head. By care and these particulars sickness may often be avoided and lives saved that would otherwise be lost.

Therapeutics.—In entero-colitis always begin with castor oil, guarded, if necessary, with opium; or calomel and bicarbonate of soda, if the fæcal evacuations show a tendency to acid fermentation; if alkaline, bismuth subnitrate or subcarbonate may be used in place of the soda. Calomel and bismuth are antiseptic and antiemetic. Bismuth is also mildly astringent, and its local action on the inflamed mucous membrane is sedative. If there are no indications of convulsions, stupor or collapse, opium in small doses combined with pepsin, or with pepsin and bismuth, answers well. The opium arrests the peristaltic action of the bowels and quiets the nervous system, while the pepsin aids digestion. Bromides and assafœtida may often be used in place of opium. When the nervous symptoms preponderate, equal parts of turpentine, sweet oil and laudanum, heated as hot as can be borne by the nurse's fingers, should be rubbed down the spine twice a day; and when pale, limpid urine is passed, it is more important to attend to it than to highly colored urine; for when it is pale and limpid a neurotic state of the kidneys exists, and powerful nerve stimulants should be given.

In cholera infantum very much the same treatment should be adopted, but stimulants should be used more freely. Probably the heroic treatment of the future, when other means fail, will be to open the abdomen and wash out the whole of the intestinal tract.

In all acute and chronic cases of intestinal diseases of children I cannot speak too highly of inunctions of almond or olive oil. If the child is rubbed two or three times a day with oil, an improvement in its condition is soon apparent. The advantages of this treatment are: First, a reduction of fever soon after the oil is applied; second, it nourishes and supports the child, which is a great desideratum when digestion is carried on imperfectly; third, it regulates the functions of the skin, which, when hot and dry, regains its natural moisture after the use of the oil. Effete material is more readily eliminated, the epithelium is softened, and the transudation of gases takes place more rapidly through the skin, oxygen being absorbed and carbonic acid gas thrown off. The importance of and benefit to be derived from bathing was early recognized by the ancients. Under the Roman emperors the baths attained a grandeur and magnificence that almost challenges belief. A great number of acres were covered by the baths of Diocletian and Caracalla. The world recognizes that the system of bathing attained its greatest perfection in the Roman empire during the days of Celsus.

At the present time there is a tendency to appreciate more fully the advantages of bathing, not only as an essential and necessary means of cleanliness, but also as a therapeutic agent for relieving, and sometimes curing, many obstinate and chronic diseases which do not respond readily to other modes of treatment.

The pepsin used should be soluble and as pure as possible. An insoluble pepsin contains inspissated mucus and ptomaines, and realizing that there is a great difference in the activity of the various preparations of pepsin, and the importance of selecting the best variety, I decided to test some of the pepsins of the market. The samples were procured from a druggist from the pepsins he had in stock. They were prepared

and labeled Nos. 1, 2, 3 and 4. Each sample contained a triturate composed of one-tenth of a grain of pepsin and nine-tenths of a grain of milk sugar. I did not know, at the time I procured the samples, whom they were manufactured by.

Test.—Several eggs were boiled for fifteen minutes, allowed to cool, and the coagulated albumen was freed from the yelk and superficial moisture, then pressed by a spatula through a brass sieve having thirty meshes to the linear inch. After thoroughly mixing the moist and divided albumen I weighed out and transferred 200 grains of it to a mortar; 110 ccm. of water acidulated with hydrochloric acid, in the proportion of 50 minims to the pint, was used, and the albumen carefully triturated with the same. The water was used in portions, so that a uniform division was obtained of the particles. This was transferred to the small cylinder placed in the apparatus, to which a water bath is attached, and where a temperature of 104° F. was sustained for six hours with frequent rotations of the digestive fluid by the pistons of the apparatus. After the stated time of the operation the cylinders were cooled and the activity of each pepsin as to its digestive power was noted. No. 1 was the only one which had digested all the albumen. This potent production is known as pepsin purum in lamellis, and is manufactured by Parke, Davis & Co. As nearly as I could ascertain without weighing the albumen in the other tubes, No. 2 had digested $\frac{70}{100}$, and Nos. 3 and 4 about 30 per cent. of the albumen in the respective tubes. The other specimens of pepsin tested were: No. 2, Fairchild's; No. 3, Boudault's; No. 4, Proctor's.

DR. J. SOLIS-COHEN, of Philadelphia, commended the use of cold water and ice externally as a means of reducing temperature, and deprecated the exhibition of the chemical antipyretics, which are usually cardiac depressants, and which aggravate the tendency to heart failure.

DR. J. A. JEFFRIES, of Boston, also advocated external cold.

DR. J. A. LARRABEE, of Louisville, considered it of great importance for the proper application of therapeutics to distinguish between the various diarrhœal diseases. Are all these diseases the same, and do they demand the same treatment? In one class could be placed thermal diarrhœas. The condition of the patient was similar to that in sunstroke, and the therapeutic indications were identical. Here the remedy, *par excellence*, is the external use of cold. He differed with Dr. Hooper in his conception of the term cholera infantum. Cholera infantum is a disease in infants similar in its clinical manifestations to cholera in the adult. It is in all probability caused by ptomaines. It is not usually preceded by ordinary diarrhœa, but begins suddenly. From the first, then, is the characteristic vomiting and their watery stool. There is rapid abstraction of serum from the blood and the child quickly becomes pale, pinched, blue and cold and, unless relief quickly comes, dies. Cases of this kind must be differentiated from thermal diarrhœa and the other forms. Therapeutic measures must be immediate. There is no time for the exhibition of the ordinary remedies. For ten years he has been in the habit of treating these cases by the hypodermic injection of morphia and atropia. He gives about $\frac{1}{200}$ gr. morphia and a very small amount of atropia to a dose. A convenient method is to dissolve a tablet containing $\frac{1}{4}$ gr. morphine and $\frac{1}{60}$ gr. atropin in an ounce of water and inject 10 drops in a child 1 year old. This treatment has been very successful. For the often following diarrhœa he resorts to antiseptics, and chief among them he ranks calomel; for enterocolitis he prefers evacuants in the early stages. He has great faith in salines to relieve the strangulation of the vessels. For chronic cases he has had good results from frequent inunctions of oils.

DR. WM. PERRY WATSON considered it very important, as a prophylactic against diarrhœal disease, to keep the legs and lower part of the body warm. In many cases milk, however prepared, cannot be retained. When this is so he stops the administration of milk and gives oatmeal water seasoned with salt and sweetened with sugar. It is given cool, in small quantities at a time, and at regular intervals. In the meantime, if the child cries, a little hot water may be given. It is an excellent remedy for ordinary colic. Cholera infantum usually follows other forms of diarrhœa, but may occur suddenly. It usually comes on the third or fourth of a series of hot days.

DR. E. F. BRUSH said that by visiting cow pastures one could predict the occurrence of epidemics of diarrhœal diseases among infants. In favorable localities, when grass is good, cows refuse to eat certain weeds, as lobelia, poison ivy, buttercups, etc. Little clumps of these weeds may be seen dotting the pasture. When hot, dry weather comes and the grass is scarce, the cattle eat these weeds and the poisons taken by the cow are excreted in the milk. These poisons are gastro-intestinal irritants and give rise to cholera infantum in bottle-fed babies. Such milk even poisons and sometimes kills sucking calves. His treatment was to stop the milk and give chloroform in emulsion with castor oil and gum arabic. He condemned the use of artificial commercial foods. He had investigated the manufacture of these foods, and he had found that they were too often made of various refuse materials. When a manufacturer had a waste product that he did not know what to do with he made it into an infant food. He knew of one that was made of salmon roe and another from the whey from a cheese factory. One preparation of beef in the market was

made of the blood from slaughter-houses, preserved with whisky. The great advantage of the home preparation of food was that it was then known what was being given.

DR. I. N. LOVE said that he would use commercial foods as he would drugs—with great discretion, and never when other means were at hand and equally good. These foods were tools, and the physician can not always stop to make them. Again, it is not always possible to get what we wish at the homes of patients. Home manufactures can not always be trusted. He was sorry to learn that men engaged in the manufacture of these foods could be so base as to put filthy refuse on the market for so sacred a purpose as the feeding of infants. He could not condemn too severely such action, but he could not believe that all manufacturers were so dishonest.

A RARE CASE OF PRIMARY LYMPHOID TUMOR SPRINGING FROM THE FLOOR OF THE RIGHT PYRIFORM SINUS. REMOVAL THROUGH THE NATURAL PASSAGES. PERMANENT RECOVERY.[1]

Read in the Section of Laryngology and Otology, at the Fortieth Annual Meeting of the American Medical Association, June, 1889.

BY JOHN NOLAND MACKENZIE, M.D.,

PRESIDENT OF THE AMERICAN LARYNGOLOGICAL ASSOCIATION; PHYSICIAN IN CHARGE OF THE DEPARTMENT OF LARYNGOLOGY AND RHINOLOGY IN THE JOHNS HOPKINS HOSPITAL DISPENSARY; CLINICAL PROFESSOR OF DISEASES OF THE THROAT AND NOSE IN THE UNIVERSITY OF MARYLAND; AMERICAN EDITOR OF THE JOURNAL OF LARYNGOLOGY AND RHINOLOGY; SURGEON TO THE BALTIMORE EYE, EAR AND THROAT CHARITY HOSPITAL, ETC.

Mr. C., æt. 42, 5 ft. 10 in. high, weight 220 lbs., of Leesburg, Va., a prominent divine of the Methodist Episcopal Church, South, consulted me May 4, 1885, on account of an obstruction in the throat which seriously interfered with his vocation as a public speaker and which, when he assumed the recumbent posture, threatened suffocation from pressure on the windpipe.

Mr. C. was otherwise in perfect health and could assign no cause for the existing state of affairs. Deliberate and natural in his style of declamation, he had occupied the pulpit without detriment to his vocal organs for over twenty years. Although convinced that the trouble causing the obstruction originated at an earlier date, the first time he felt sure there was anything the matter with his throat was about eight months prior to the time at which he came to me for advice. At that period he became aware of a sensation which he compared to a piece of phlegm in the throat which seemed fastened to the epiglottis, and which could not be removed by expectoration. Soon after, difficulty in public speaking was experienced; the throat would clog up when it became dry in speaking or when an effort was made to swallow. At the same time something would seem to sink down into the throat and close up the windpipe. He consulted his physician in Warrenton, Va., where he then resided, and was told that the uvula was elongated and lying on the tongue, and was given astringents to contract it. Several months of this treatment failing to remedy the disorder, he had the uvula "clipped" by a physician in Baltimore. This failing also to relieve, he returned to his native place and again consulted his former adviser, who found the soft palate considerably inflamed and the whole palatine arch in a relaxed condition, so that the mucous membrane "sagged down like a wet sheet." This condition was dissipated apparently by a few weeks' treatment with ordinary sprays, but after the parts became normal, he was still conscious of the obstruction to respiration. He again sought advice, insisting that there was something in the larynx. By depressing the tongue and causing retching, his physician discovered the upper portion of what he took to be a growth upon, or hypertrophy of the epiglottis, and advised him to consult a special surgeon at once.

At my request, Mr. C. prepared a detailed history of his case from which I take the following extract, in view of the interest attaching to the symptomatology of this class of growth: Prior to the discovery of the obstruction, "changes in the voice in preaching would occur in the same day, and sometimes in the same sermon. Sometimes the voice would be heavy and harsh in the morning, and difficult to control, and at night more flexible and easier to manage; or *vice versa*. Now it is disposed to be smothered, and I cannot with any comfort sing. This is its condition all the time. It was only when the growth began to impinge upon the epiglottis that the choking began. There is no soreness. I cannot lie on my left side and sleep. If I turn into this position at night I cannot get my breath. The growth seems much larger at some times than at others. Extreme cold or heat affect it. I cannot have comfort in a crowded, warm place. A temperature of about 50° F. seems to suit it best. Deglutition of dry food is impossible; it seems to adhere to the surface of the growth and stop the passage of air to the lungs. Speaking does not appear to injure it, but, on the contrary, it sometimes gives less annoyance after preaching than before, especially if the temperature of the room is not too high. It feels as hard as a piece of tender beef, but not larger than it did six months ago. Astringents seem to cause it to swell up instantly. Several times before I knew what it was, muriated tincture of iron was applied as far down as possi-

[1] The growth was presented before the Medico-Chirurgical Faculty at its meeting in 1885 (*vide* Transactions).

ble with the effect of stopping my breath. Recently, any violent exercise, which rapidly increases respiration, causes the growth to swell. The same is true of any nervous excitement."

Examination of the throat was rendered difficult by the large size of the patient's tongue, which, when protruded, occupied almost entirely the buccal cavity and prevented the satisfactory introduction of the laryngeal mirror. Laryngoscopy was therefore undertaken with the tongue depressed, as much as possible, by means of a spatula. Only the right half of the larynx could be seen, the left being covered by a large smooth, globular, bright-red mass which extended from a point a little to the left of the median line to the right lateral wall of the pharynx, filling the corresponding pyriform sinus, from which cavity it apparently sprang. The growth was distinctly movable both on manipulation and phonation. It could just be reached with the finger and communicated to the touch the sensation of a soft elastic, semi-solid body, with here and there small areas of a harder substance. By exciting retching, the upper surface of the tumor appeared above the upper edge of the epiglottis.

On May 5, I operated as follows: Having provoked retching, the growth was caught with a pair of laryngeal forceps in its ascent and drawn as far upward as possible toward the base of the tongue. The handles of the forceps were then entrusted to my friend, Dr. S. Johnston, who was kindly present, and upon the forceps as a guide, the strong silver wire of an écraseur was threaded and carried to the base of the growth, which was then rapidly severed, the whole operation taking only two or three moments. The patient expectorated no blood after the extirpation of the growth.

Laryngoscopic examination immediately after the operation discovered in the centre of the floor of the right pyriform sinus a small raw, slightly bleeeding surface which marked the site of the tumor's base. The patient thought that, during the night, some hæmorrhage took place from the wound, the blood entering the stomach, but on the following morning, a firmly organized clot occupied the seat of operation and the patient was allowed to return to his home in Virginia.

The growth was about the size and shape of a testis, was soft and elastic to the touch and gave a distinct sense of fluctuation. On section, it appeared to be made up of a soft elastic tissue in which innumerable tolerably hard whitish points were seen. Microscopical examination undertaken by Professor Councilman, of the Johns Hopkins University, disclosed the following: The growth was covered over with epidermis which showed in several places slightly rough elevations. Under the microscope, were found "externally, well-formed mucous epithelium, while the body of the tumor was composed of areolar connective tissue in which there were small areas of small cells similar to the lymphoid corpuscles. Immediately beneath the epidermis, this lymphoid tissue was most abundant. There was no glandular tissue in the growth nor any glands opening on its surface. The small cell areas could well belong to the follicular tissue so common in the pharynx."

In other words, the tumor was composed of the lymphoid pharynx tissue so graphically described in recent years by Waldeyer and his pupils, and I have therefore used the term "lymphoid" as best expressive of its true nature.

The origin of the growth was doubtless due to some form of local irritation—possibly in the case before us to a neglected localized inflammation of the pyriform sinus.

Outgrowths, generally fibrous in nature, are occasionally met with in the glosso-epiglottic fossæ, or projecting from the tonsils and lateral pharyngeal walls, but primary growths of the pyriform sinus are excessively rare. As the above case is probably unique, I have thought it worthy of record.

Over four years have elapsed since the removal of the growth without any signs of its recurrence.

DR. J. SOLIS-COHEN remarked that it was rather curious that this unique growth originated in the position from which some few cases of lipoma had taken origin.

IMPAIRED VISION AS THE RESULT OF SUNSTROKE.

Read in the Section of Ophthalmology at the Fortieth Annual Meeting of the American Medical Association, Newport, R. I., June, 1889.

BY A. R. BAKER, M.D.,
OF CLEVELAND, O.

My attention was called to this subject a few years since by the commissioner of pensions, who referred a number of cases to me for expert examination for alleged impaired vision as the result of sunstroke while in the service. Upon referring to works upon the eye and special articles treating the subject of sunstroke, I found little, of value bearing upon this point. Most articles discussing the etiology of atrophy of the optic nerve mentioned sunstroke as one of the causes; and treats upon the sequela of sunstroke mentioned blindness as one of them. But as to any information as to the frequency of atrophy of the optic nerve as the result of sunstroke, or as to the pathological conditions, the symptoms, diagnosis or treatment, these works make no mention; and the only report of cases that proved of any value in my researches was that of Dr. Hotz, in a paper entitled "Notes of Intra-ocular Lesions Produced by Sunstroke" (*American Journal of Medical Sciences*, July, 1879). In this paper Dr. Hotz reported a number of cases in which an ophthalmoscopic examination shortly after the sunstroke revealed an optic neuritis. In

none of these cases was the swelling of the optic nerve excessive, and all recovered with vision little, if any, impaired, and a very slight, if any, atrophy. In the *Medical Record* of April 28, 1888, there appeared a paper by Dr. Thos. A. Spaulding, of Portland, Me., on the subject, a part of which was read at the preceding meeting of the American Ophthalmological Society. In this paper it is stated that "no member present had ever heard of the sight being affected by sunstroke." As this statement appeared to be somewhat remarkable I addressed letters to a number of physicians who, owing to long experience in military and civil practice, I thought would have met such cases; but all the physicians to whom I addressed these letters answered that they had never met a case of blindness or impaired vision as the result of sunstroke.

Among 13 cases referred to me for expert examination with impaired vision, alleged as the result of sunstroke, I met three cases of simple hypermetropia, two of senile cataract, one of progressive myopia, one of detachment of the retina, and one of disseminated choroiditis, probably of syphilitic origin. Judging from these cases, and from the almost entire absence of references to this subject in medical literature, I am not surprised that many observers are inclined to doubt the existence of impaired vision as the result of insolation. I wish to put on record the following cases, which, to my mind at least, present conclusive evidence that vision is sometimes impaired as the result of sunstroke; and it is to be hoped that in the future the fundus of the eye will be carefully examined in all recent cases so that the frequency of optic neuritis as the result of this cause may be determined.

Case 1.—Mr. H. M., aged 39, examined April 25, 1887. Had sunstroke while in the service July, 1864. Has had neuralgia and pain in the head almost continuously ever since; this is especially severe when exposed to heat. He followed his usual occupation as a miner for some years after returning from the army, but gradually became unfit for work and now has partial paralysis of upper extremities. He has complained of impaired vision ever since he came out of the army, his sight being poor especially at night. Never associated the loss of sight with sunstroke. No other cause for neuralgia, paralysis, loss of sight and other nervous affections can be discovered. Partial white atrophy of optic disc; field of vision very much contracted; vision, left eye, $\frac{20}{30}$ (Snellen); right eye, $\frac{20}{40}$; refraction normal. A record taken five years previously showed no appreciable change in his field of vision.

Case 2.—Mr. A. J. W., farmer, aged 65; examined August 1, 1887. Had sunstroke in June, 1864. Has suffered from constant headache confined to right side of head. This side of the head is always more or less tender on pressure. Mind not very clear; prematurely old; slight paralysis of left side of body; dragging of left foot in walking; cannot bear heat of sun; always carries an umbrella when sun shines. Has fallen to the ground frequently during hot weather, and only resuscitated by cold water affusions. Complete white atrophy of outer half of optic disc of left eye, and inner half of right optic disc; left lateral hæminopsia; vision, left eye, $\frac{20}{100}$; right eye, $\frac{20}{100}$ (Snellen). I examined the eyes with the ophthalmoscope before taking field of vision, and was able to say, from the atrophic condition of the outer half of one optic disc and the inner half of the other, that the patient was suffering from hæminopsia.

Case 3.—Mr. J. T., aged 45; examined November 5, 1888. Had sunstroke in summer of 1864. Has been a constant sufferer from neuralgia, photophobia and other nervous affections since date of sunstroke. Has never been able to engage in any business or occupation. Does not venture outside of the house on days when the sun is shining. He requires the same constant care and attention as a child six or eight years of age. There is complete white atrophy of the optic nerve of left eye. Veins are large and arteries very small. The blood-vessels about the disc are very tortuous, showing previous intense neuritis. Partial white atrophy of right optic disc. Blood-vessels somewhat tortuous, but not so much so as in the other eye. Vision left eye, slight perception of light; right eye, $\frac{20}{50}$ (Snellen).

Case 4.—Dr. T., aged 57; examined April 15, 1889. In June, 1863, while in charge of a picket line as medical officer, he became insensible from sunstroke. He was totally blind for three days. His sight gradually returned, but with the field of vision extremely limited. He describes it as looking through two small gimlet holes. The brightest day appears to him as mere twilight, and at night he is almost completely blind. He has lost all color perception. Although he has had to avoid walking on the streets on hot days, and his general health has not been robust, he has proven himself a man of indomitable will, and, notwithstanding his impaired vision, he has been a successful practitioner of medicine, and still continues to do an office practice. He has white atrophy of both optic nerves of such a high degree that it seems remarkable that he can see at all. The field of vision is only about two inches in diameter at a distance of 12 inches. Vision right eye, $\frac{20}{60}$, with 2 D. C. axis 90=$\frac{20}{40}$ (Snellen); vision left eye, $\frac{20}{60}$, with 2 D. C. axis 90=$\frac{20}{100}$.

In addition to these cases, all of which occurred in old soldiers, I wish to report the following case, which very closely resembles those reported by Dr. Hotz:

Mr. H. B., aged 45, merchant. Had sunstroke on July 4, 1886. First examined on August 5th

of the same year. Patient suffering from headache, dizziness, nausea, occasional diplopia and dimness of sight. Ophthalmoscopic examination revealed an optic neuritis of both eyes; outlines of the disc could not be distinguished. Veins large, arteries small. Vision, right eye, $\frac{2}{40}$; left eye, $\frac{2}{60}$ (Snellen). Refraction normal. Have had the case under observation most of the time since the above date. At present there is no appreciable atrophy of optic nerve. There is a slight tortuosity of blood-vessels. Vision $\frac{2}{20}$ in either eye. Health good. No nervous disturbances except that the patient seems to be afraid that there is something serious going to happen, and makes the life of his medical adviser a burden by constant inquiries after this or that insignificant symptom.

In view of these cases, notwithstanding the fact that out of thirteen cases of alleged impaired vision as the result of sunstroke nine were found to be suffering from affections that could have no possible connection with this cause, I am led to believe that impaired vision does result from sunstroke in a large number of cases. We would expect this from an affection which produces such a profound impression upon the cerebral centres.

It is not necessary for me, before such an audience as this, to enter into a detailed account of the intimate relation existing between the optic nerve and the brain and its meninges. I wish simply to emphasize the importance of making an ophthalmoscopic examination of the *fundus oculi* in all cases of *coup de soleil*. This examination should be made immediately after the attack, at a somewhat more remote period, and in all cases where there is alleged impaired vision as the result of sunstroke, no matter if it be at a period many years afterward.

RELAXATION AND MANAGEMENT OF THE PERINEUM DURING PARTURITION.

Read before the Golden Belt District Medical Society of Kansas, July 4, 1889.

BY WILLIAM B. DEWEES, A.M., M.D.,
OF SALINA, KAN.

Mr. President and Fellows of the Golden Belt District Medical Society of Kansas:—In performing the duty assigned me on this occasion, I have chosen to briefly consider the *relaxation and management of the perineum during parturition.*

Great rigidity of the tissues at the pelvic outlet, as a cause of lacerations and other serious complications in labor, is—as we are all fully aware—an old topic, and almost worn threadbare from discussions *pro* and *con* as how the better to overcome this abnormal condition; nevertheless the little triangular, pyramidal or wedge-like body, known as the perineum, often meets with a serious lesion, occurring as an accident to parturition.

Believing that immunity from perineal injuries is due to a better knowledge of preventive means, we offer no apology in presenting the subject for your consideration.

Prof. H. Lenox Hodge,[1] writing on this subject, says: "There are few complications which demand the more sedulous attention, and the best exercise of the judgment and skill of the accoucheur."

Prof. Wm. P. Dewees[2] observes: "There is no more frequent complication of labor, or one more productive of dangerous consequences to the mother and child."

The very great variety of opinion, by those who write and teach, as to the best mode of caring for the perineum, sets forth the necessity for a closer study and fuller discussions of the subject. One of the most delicate as well as most responsible tasks which devolve upon the accoucheur is the regulation of the exit of the child's head and consequent management of the mother's perineum. He who preserves the integrity of a perineum which is in peril, shows more skill and consummates higher art than he who successfully repairs a perineum which has been *torn*.

The method of universal success has not been found, nor can it be confidently hoped for. However, better methods with better results may be expected. Under any method of management yet devised, injury occurs in a considerable number of cases. The history of accidental parturient wounds of the perineum proves that they occur in the experience of every practitioner of obstetrics, however skilful he may be. But, it cannot be denied that they occur most frequently in the hands of the unskilful; that a large percentage of such cases are avoidable, and that many others, by prompt and well directed assistance, may be limited in their extent.

The question of the proper management of the perineum during labor is no longer dwelt upon in our schools as formerly; indeed, in some it is not taught at all, the direction being "if the head be delayed, place the forceps, and pull it through; a few stitches will make it all right." How different this, from the instructions imparted in my *Alma Mater;*[3] how well do I remember that venerable teacher, Prof. R. A. F. Penrose, folding a napkin to a soft smooth surface, and placing it upon the distended perineum of a manikin, assuming a position to support against the advancing head. "Gentlemen," said he, his face reflecting the conscious responsibility and anxious interest which should be felt by every one who assumes to aid the physiological act of parturition, at the moment when the future happiness and

[1] Hodges' System of Obstetrics, p. 423.
[2] Dewees' System of Midwifery, p. 358.
[3] University of Pennsylvania, Med. Dept., at Philadelphia.

comfort of a suffering woman is depending upon a tear, or no tear, "how long should you hold your position here?" "I answer one hour, two or three hours if needed, until this head is extruded and this perineum saved." "Remember the law; every perineum will properly distend if time be given to prevent rupture."

This early imbued attention to the perineum has saved many a one under my care. But in the light of our present knowledge it may be carried too far. The question of "how long shall we wait?" takes a new point of consideration. The condition of the child and mother come earlier into account.

From great rigidity of the perineum and adjacent soft parts, and strong, violent contractions of the uterus, there has occurred:

1. Death of the child.[4]

2. Rupture of the uterus and death of the mother.[5]

3. Laceration of the perineum and sphincter ani.[6]

4. *Convulsions* and *violent spasms*, from prolonged pressure of the fœtal head on the obturator nerves and sacro-sciatic plexuses. Such irritations being propagated to the spinal marrow and brain, disturbing their functions; hence these excitations.[7]

5. *Inflammation* and *mortification*, which has sometimes proved fatal; and in other cases, though the mother recovered, she has been subject to an involuntary discharge of fæces and urine through the vagina.[8]

6. *Atony of the uterus;* the contractions being thus insufficient to expel the fœtus, even though the rigid soft parts should then become relaxed.[9] Delivery being now accomplished with the forceps, yet the injury does not end here; from inability of the uterus to contract, an hæmorrhage supervenes, which is generally fatal to the mother.[10]

And when we add to these, the risk of rupture of the blood-vessels;[11] fatal congestions of brain and spinal marrow, also in the viscera of the chest and abdomen;[12] death from exhaustion of vital power or, according to Dr. Churchill, of the "nervous shock."[13] While, even when every precaution is taken, there are cases in which extreme smallness of the vulva, and rigidity of the soft parts, with a disproportionately large fœtal head, make it impossible for the head to be expelled without greater or less rupture of the perineum.[14]

All of which have happened, and may again happen under similar circumstances. We cannot suppose that any great advantage can be derived from "waiting patiently for the efforts of nature," in complicated and protracted cases.

Having pointed out some of the evil consequences arising from a rigid state of the perineum and adjacent soft parts, we proceed to the consideration of the means by which to relax and give distensibility to these tissues, that they may sufficiently dilate in due time, and these evils be remedied. We shall notice:

First.—Some of the various methods as practiced and recommended by those who write and teach on this subject.

Second.—The means which a diligent and earnest endeavor to relieve the suffering incident to rigidity of the perineum and adjacent soft parts, by an impartial and unprejudiced examination of facts, and the dictates of reason; it has been my privilege to witness the beneficial results of the intelligent application thereof, at the bedside of suffering woman.

The practice of caring for the perineum has been in vogue since the days of Avicenna, almost 1,000 years. The various methods taught and practiced, as found in the literature on this subject, we shall endeavor to give in a brief *résumé*. The former plan recommended, according to Galabin,[15] was to press with the palm of the hand upon the perineum, when stretched over the advancing head, and so check that advance."

Baudelocque[16] firmly supported with the palm of the hand during a pain, and attempted forcible dilatation of the vulvar outlet during the interval.

Velpeau[17] advises the hands so placed that the radial side of the forefinger is in relation with the fourchette.

Ramsbotham,[18] resting his elbow upon the head, placed his hand against the perineum.

Depaul[19] places two fingers of the left hand on that portion of the child's head corresponding with the anterior commissure of the vulva, and two fingers of the right hand over that portion which corresponds with the posterior commissure, and thus counterbalances the effect of the uterine contractions.

Collins[20] applies the palm of the hand direct to the perineum during pain, with a soft cloth intervening. This plan was adopted by Meigs and Penrose, of Philadelphia, Pa. Glisau[21] teaches the same plan without the cloth.

Chailly[22] placed the patient on her back and

4 Hodge's Obstet., p. 420; Case No 4 of this paper; Playfair's System of Midwifery, p. 349.

5 Foster's Midwifery, p. 246; Dewees' Baudelocque's Midwifery, p. 555; Hodge's Obstetrics, pp. 423, 452.

6 Dease's Midwifery, p. 36; Denman's Midwifery, Vol. i, pp. 68, 383; Foster's Midwifery, p. 246; Cazeaux's Midwifery, p. 680; Hodge's Obstet., p. 422.

7 Hodge's Obstet., pp. 421, 423; Denman's Midwifery, Vol. ii, p. 403.

8 Clark's Practical Essays, p. 68; Dease's Midwifery, pp. 38, 75; Hodge's Ob., p. 421.

9 Cazeaux's Midwifery, p. 679; Hodge's Obstet., 421; Playfair's System of Midwifery, p. 350.

10 Hamilton's Cases, order 2, c. 1; Dr. Braxton Hicks, Obstet. Trans., Vol. ix.

11 Ibid., Vol. ii, p. 50.

12 Hodge's Obstet., p. 421.

13 Playfair's Midwifery, p. 350.

14 Cazeaux. Midwifery, p. 678; Playfair's Midwifery, p. 288.

15 Trans. State Med. Soc. W. Virginia, p. 447.

16 Dewees' Baudelocque's Midwifery, 1823, p. 217.

17 Manual of Midwifery, 1831, p. 348.

18 System of Obstetrics, p. 151.

19 Trans. Med. Soc. of W. Virginia, 1887, p. 447.

20 Treatise on Midwifery, 1841, p. 10.

21 Text-book of Modern Midwifery, 1881, p. 397.

22 System of Obstetrics, 1884, p. 210.

passed his right arm under her right thigh, and pressed his palm on the perineum, with the radial border of the index finger upon the outer border of the perineum, and the thumb extended on the right thigh. He at the same time placed his left arm over the thigh, with the fingers upon the vertex, for retardation and support. This is called the *Vienna* method.

Schröder[23] directs pressure upon the head, through the perineum, with the ball of the thumb or the fingers, for both support and retardation.

Lusk[24] gives direct pressure with the flat hand to the perineum in cases where central perforation seems imminent, and where there is defective elasticity he passes the left hand between the thighs and presses the head forward and inward, at the same time preventing undue extension by pressing backward through the perineum with the disengaged hand.

Niemeyer[25] advises pressure on the perineum in the direction of the axis of the inferior strait; more, however, with a view to extension of the head than of direct support.

Cazeaux,[26] in the former edition, says: "Press the whole perineal surface equally, and with a moderate degree of force, by the palmar face of the hand." But in the last (seventh) edition[27] the views of Goodell are recommended, both by Tarnier and Hess, the American editor.

Goodell[28] holds the head back by placing his thumb against the occiput, while drawing forward the perineum by hooking one or more fingers in the rectum.

Hodge[29] placed the finger over the posterior commissure of the vulva, so as to give it a firm support; at the same time the fingers of the other hand, upon the occiput, may prevent any sudden exit of the head.

W. Tyler Smith[30] advised holding back the head with one hand, with the other making the degree of distension.

McGaughey[31] supports the perineum by placing the right hand with palm on the centre of that body, with the fourchette between the thumb and forefinger, while the left hand is placed over the thigh, with its palm upon the head and the fingers touching the anterior thinned edge of the perineum, to hold back the head and at the same time to direct it forward.

W. A. Duncan[32] simply applies pressure to the advancing head, with the fingers in the shape of a cone.

Hohl[33] grasps the occiput with the hand, the thumb above and the fingers below, thus holding back the head during a pain.

Garrigues[34] makes moderate pressure with the flat hand, so that the fold between the thumb and finger rests upon the posterior commissure.

Robert Barnes[35] applies the palm of the hand, so spread out as to rest upon the coccyx behind, and upon the pelvic floor, at the same time pushing up the skin from adjacent parts toward the fourchette.

Playfair[36] says: "If, when the head is distending the perineum greatly, the thumb and forefinger of the right hand are placed along its sides, it can be pushed gently forward over the head at the height of the pain, while the tips of the fingers may at the same time press upon the advancing vertex, so as to retard its progress if advisable." He thus aims with a view to relaxation rather than support.

Gardner[37] follows the same method as Playfair, but with a view to support, not relaxation.

Fasbender[38] places the patient on her left side, then standing behind her, seizes the head, the index and middle fingers applied to the occiput and the thumb in the rectum. He is thus enabled to control the head during a pain. Between the pains, he claims, the head can be pressed forward with the thumb, at the will of the operator.

Parvin[39] advocates applying the concave palm of the right hand to the convexity of the bulged perineum, while the left hand, passed over the right thigh, grasps the head and retards or directs it at will.

Reamy[40] says: "Place the patient on her back across the bed, with her nates brought to its verge; the thighs are flexed upon the abdomen, and the legs upon the thighs, with the knees close together. The limbs are held in this position by two assistants, one on each side sitting on the edge of the bed, with their backs toward the patient's head, who are given opposite ends of a towel or bandage of linen, about 10 inches wide and 40 or 50 inches long, which is carried around the buttocks spread out smoothly, with its anterior or upper edge on a level with the fourchette. They are then instructed to make traction, during the pains, in such amount, in such directions, and with such part of the bandage as the accoucheur may direct."

Englemann[41] advocates the semi-recumbent position in labor as the best in ordinary cases, and thinks that in this position there is a certain amount of support, which does away with the old method, which he thinks usually does more harm than good.

[23] Manual of Midwifery, 1878, p. 93.
[24] New York Med. Jour., 1880, Vol. xxxii, p. 595.
[25] Brit. Med. Jour., 1861.
[26] Theoretical and Practical Midwifery, 1871, p. 678.
[27] Theory and Practice of Obstetrics, 1884, p. 680.
[28] Am. Jour. Med. Sciences, 1871, p. 55.
[29] Prin. and Prac. of Obstet., 1864, p. 192.
[30] Lectures on Midwifery, p. 365.
[31] Am. Jour. Obstet., Vol. xvii. p. 580.
[32] London Lancet, 1884, p. 202.
[33] Grundriss der Geburtshülfe.
[34] Am. Jour. of Obstetrics, 1880, p. 241.
[35] System of Obstetrics, Med. and Surg., p. 431.
[36] System of Midwifery, 1884, p. 287.
[37] Tyler Smith's Lectures on Midwifery, p. 365.
[38] Trans. Med. Soc. of W. Virginia, 1887, p. 447.
[39] Trans. Am. Gyn. Soc., 1882, p. 145.
[40] Paper read before Am. Gyn. Soc., September 23, 1885.
[41] Trans. Med. Soc. W. Virginia, 1887, p. 448.

Dumas[42] recommends a procedure which he designates "præ-fœtal dilatation of the vulva." It consists in introducing two or more fingers and the thumb of the right hand into the vagina, and fitting the hand on to the head, not exerting any force on the approaching head, but rather allowing it to push the hand in front of it, and thus take the place of a dilator.

Ritgen[43] advises introducing two fingers into the rectum, and pushing the fœtal head upwards and forwards in the direction of the vaginal orifice. Many other substitutes might be cited for the purpose of "perineal support" and "perineal relaxation" by men eminent in the profession, but I shall spare you the infliction; this sufficing to prove,

First: That the practice of caring for the perineum has been entertained by the leading obstetricians for almost ten centuries.

Second: That tearing of the perineum has been likewise recognized, as an abnormal concomitant to labor—hence the scientific attention for guarding this body.

In summarizing the methods practiced we find that they are of three distinct classes, viz.:

First: Perineal support.

Second: Perineal relaxation.

Third: Perineal abstaining.

The first class, or those who direct their attention with a view of "supportimg the perineum," may be divided as follows: 1. Methods which aim at protection chiefly by applying direct to the perineum some artificial means of support.

As advocates of this class may be cited Baudelocque, Velpeau, W. P. Dewees, Ramsbotham, Barnes, Cazeaux, Meigs, Penrose, Neimeyer, Tarnier, Hess, Playfair, Collins, Glisau, Gardener, Gooch, Garrigues, Reamy and Opie.[44]

2. Methods which aim at protection by endeavoring to retard the rapid descent of the head, and at the same time afford direct support to the perineum.

As supporters of this class we find Schröder, Lusk, McGaughey, Chailly, Hodge, Parvin, Fasbender.

The second class, or those who direct their attention with a view of "relaxation of the perineum," may be divided as follows:

1. Methods which aim chiefly to prevent the rapid descent of the head by direct pressure upon it, in order to gain time for adequate relaxation of the perineum.

Among this class we find notably, Kohl, W. A. Duncan, W. Tyler Smith, E. Warren Sawyer, Meigs, Penrose, Goodell and Depaul.[45]

2. Methods which aim chiefly to accomplish relaxation by artificial means of forcible dilation of the vulvar and vaginal outlets—with the finger or otherwise—some at the same time practicing a process of enucleation. As exponents of this class we cite Ahlfeld, Duke, Dumas, Olshausen, Ritgen, Smellie.[46]

3. Episiotomy as a *dernier ressort* in cases of extreme peril.

This practice has found able followers in Sir James Simpson,[47] Chailly-Honore,[48] Anna E. Broomal,[49] Manton,[50] Madden,[51] Fordyce Barker,[52] Tyler Smith,[53] Cazeaux.[54]

The third class, or those who direct their attention with a view of letting the perineum religiously alone—total perineal abstaining. This practice finds high authority in the writings of Hewitt[55] and Leishman.[56]

We thus find that by far the greater number of the authorities trust in some method of preservation, and that methods which combine judicious perineal support with simultaneous retardation of the fœtal head meet with most favor. Again, we find, "Naegle, Grenser, Kleinwachter and Mathews Duncan think that the plan by relaxation gives *no better* results than other methods."[57] Parvin[58] says "perineal support is not likely to be abandoned, and he does not believe it can be replaced by hip bandages or rectal pressure."

Prof. Dumas[59] criticises the various methods of supporting the perineum, and comes to the conclusion that none of them are either scientific or satisfactory.

Playfair[60] says: "Much error may be traced to a misconception of what is required. The term 'supporting the perineum' conveys an unquestionably erroneous idea, and it is certain that no one can prevent laceration by mechanical support. If the term 'relaxation of the perineum' was employed, we should have a far more accurate idea of what should be aimed at; and if this be borne in mind I think it cannot be questioned that nature may be most usefully assisted at this stage."

Grailly Hewitt, Leishman, Goodell and other eminent authorities have with untiring zeal endeavored to show the evil effects likely to follow supporting efforts. They maintain that by pressure exerted in this fashion we not only fail to prevent, but actually favor, laceration, in consequence of the pressure producing increased uterine action just at the time when forcible distension of the perineum is likely to be hurtful. Hence the opinion, notably of Hewitt and Leishman,[61]

[42] Montpellier Médicale, 1883.
[43] Med. and Surg. Rep., Vol. xlix, p. 245.
[44] All given—loc. cit.
[45] Loc. cit.
[46] Loc. cit.
[47] Obstet. Works.
[48] Traité pratique de l'art des Accouchement, 1867.
[49] Am. Jour. Obstet., Vol. xi, p. 577.
[50] Am. Jour. Obstet., March, 1885.
[51] Am. Jour. Obstet., 1872.
[52] Puerperal Diseases.
[53] Loc. cit.
[54] Loc. cit.
[55] Brit. Med. Jour., 1860.
[56] System of Midwifery, 1879, p. 268.
[57] Opie's Paper, Trans. Med. Soc. W. Virginia, 1887.
[58] Loc. cit.
[59] Loc. cit.
[60] System of Midwifery, 1884, p. 287.
[61] Loc. cit.

that the perineum ought to be left entirely alone, and that the head should be allowed to gradually distend it, without any assistance on the part of the practitioner.

The frequency of rupture of the perineum during parturition is variously stated, as is also the opinion of the delivery with forceps as a cause of this injury.

Tyler Smith[62] says "laceration of the perineum is no uncommon accident."

M. D. Mann[63] states, "It is quite common in primiparæ and after forceps."

F. A. Reamy[64] writes: "Perineal lacerations are far more common than is generally recognized by physicians and patients."

Dr. Tait[65] reported seventy ruptures in 142 primiparæ.

Prof. Braun's[66] division of the Vienna General Hospital, in 1,157 primiparous cases, rupture occurred but sixty-eight times.

D. Hayes Agnew:[67] Such accidents doubtless take place, in a large majority of cases, from ignorance or carelessness on the part of the medical attendant, and yet may and do occur in the hands of the most competent and expert practitioners." "It is only in unskilled hands that the forceps can be said to do harm in this way."

Fordyce Barker[68] says: "The forceps may be a mechanical cause of rupture, and they may be a most efficient means of preventing rupture, especially in that class of cases where injury to the tissues may result from long-continued pressure upon the perineum. The danger in the use of the forceps arises from the fact that they are used as instruments of direct traction instead of instruments to complete a normal process—a physiological delivery of the head." The late Prof. Geo. T. Elliott,[69] one of the most accomplished of obstetricians, with all his skill, failed to prevent this accident at times. He cites a specimen: "It became necessary to resort to the forceps, and although I used the smallest and lightest in my possession, and all due skill and care, an appalling laceration occurred, splitting the sphincter ani and the vagina throughout its whole length to the bottom of Douglas' cul-de-sac."

Prof. Peaslee[70] stated in a report: "I then applied Elliott's forceps, the head being high up in the superior strait. While making traction quite forcibly, but very slowly, the blades of the forceps sprung, and their descent cut through the sphincter ani, and about 1½ inch up the rectum."

Prof. Wm. Goodell,[71] speaking of the use of the forceps, says: "There is such an abuse of this instrument that I sometimes think that Baudelocque was right when he said that the forceps had done more harm than good. It requires great skill and judgment to end a labor with forceps. A physician from inexperience, or being demoralized by the long and tedious labor, is liable to use undue violence and deliver the head too quickly, or to make traction in the wrong direction. I have myself torn the perineum, and have seen many good physicians do the same. Tears of the perineum will occur whether the physician uses the forceps or not, but in the majority of cases they come from the abuse of the forceps."

Olshausen[72] reports, as the result of the preventive measures adopted at the clinic in Halle during a period of ten years, 21.1 per cent. of perineal injuries in primiparæ, and 4.7 per cent. in multiparæ. These percentages do not include slight tears confined to the perineum. He regards 15 per cent. not too high an estimate for the absolutely unavoidable lacerations due to defective distensibility of the perineum, and to the disproportionate size of the child's head.

Parvin[73] says ruptures occur in from 20 to 30 per cent. of primiparæ, and in from 5 to 10 per cent. of multiparæ.

Schröder[74] found that lacerations occurred in 37.6 per cent. of cases delivered in the dorsal position, and 24.4 per cent. in other positions. Schröder's statistics are very strong, as showing that ruptures of the perineum are more common when women are delivered upon their back—French position—than when placed upon their left side—English position.

The authorities hold the same general opinion, viz.: that the frequency of these accidental parturient lacerations of the perineum may be lessened from 5 to 10 per cent. with due exercise of care and skill. My own experience warrants the statement that they may be reduced to even a considerable less percentage than this. By practicing the management which I shall hereinafter describe, there occurred fifty-one lacerations of the perineum in 1,000 consecutive cases of parturition, under my care. Of these, twenty-four were slight, twenty-two considerable, and five penetrating deep into and almost entirely through the sphincter ani.[75]

This gives 5.01 per cent. of all cases—primiparæ and multiparæ combined.

(To be concluded.)

[62] Loc. cit.
[63] Loc. cit.
[64] Loc. cit.
[65] Trans. Cin. Acad. of Medicine.
[66] Trans. Cin. Acad. of Medicine.
[67] Lacerations of Female Perineum.
[68] Puerperal Diseases.
[69] Am. Jour. of Obstet.
[70] Trans. New York Obstet. Soc.
[71] Med. and Surg. Reporter, Vol. I, p. 741.
[72] Am. Jour. Med. Sciences,—Goodell.
[73] Trans. Am. Gyn. Soc., 1882.
[74] Loc. cit.
[75] This does not include slight tears confined to the fourchette. It should also be remembered that women of good development, and laborious exercise, constituted the greater portion of my cases, my practice being confined to a farming community—in town and country. There occurred 226 cases of well-defined rigidity among these 1,000 cases.

THE CLINIC.

REGULAR SURGICAL CLINIC AT RUSH MEDICAL COLLEGE, CHICAGO, OCTOBER 15, 1889.

BY CHARLES T. PARKES, M.D.,
PROFESSOR OF SURGERY.

[Reported for THE JOURNAL.]

Case 1.—Mrs. H., Chicago, age 44, American, housewife.

Gentlemen:—This patient you will recognize as the one upon whom we performed vaginal hysterectomy, three weeks ago, for cervical carcinoma. She is perfectly well and desires to leave the hospital.

You will remember that the broad ligaments before division were secured by means of two pair of long-jawed forceps, for the purpose of preventing hæmorrhage, and no ligatures were used; and you will also remember that very little blood was lost at the time of the operation. The operation was finished at 2:30 P.M.; the patient was returned to the hospital and put to bed. She rested very comfortably until about 8 P.M., when she was seized with severe vomiting, and this was followed by profuse hæmorrhage from the vagina. I saw her within a few moments after its occurrence, exposed the parts and ascertained the cause of the hæmorrhage to be from the slipping of a part of the tissues grasped in the forceps placed upon the left broad ligament, which undoubtedly let free the uterine artery. The cause of this accident was the succussion of the vomiting secondarily; primarily it was rendered liable for the following reasons, viz: The use of the strong-jawed forceps is followed by a slough of all the tissues included in their grasp. This slough is slow in separating, gives rise to rather a foul discharge, and is accompanied with some danger of infection. With the intention of avoiding these conditions I attempted to apply this pair of forceps more loosely than heretofore. My idea was to make just enough pressure to control the bleeding, and not enough to kill the tissues included in the grasp of the forceps; hence I fastened it only by the first catch instead of shutting the handles down to the third notch. This controlled the hæmorrhage, but as soon as the straining of the vomiting came on the tissues pulled out of the grasp of the forceps and bleeding occurred immediately. Without anæsthetizing the patient an attempt was made to seize the bleeding vessels with other forceps, and believing that I had been successful I left the patient. Within half an hour I was informed that the bleeding had recurred as badly as ever. The patient was now anæsthetized and the parts thoroughly exposed, but no bleeding artery could be found. The entire surface and cavity were now thoroughly packed with strips of iodoform gauze and bleeding did not recur. The forceps were all removed at the end of forty-eight hours. The packing was gradually removed from day to day. The patient went as rapidly to recovery as if the hæmorrhage had not taken place. All things considered, it is perhaps the best plan to clasp the forceps as tightly as possible. Excessive hæmorrhage does not always retard the recovery of patients, although it should be the rule to use every precaution to prevent its occurrence.

Case 2.—Mrs. G., Baraboo, Wis., age 28, American, housewife. This patient, whose family history and previous history are good, has suffered for six months from some abdominal trouble. Inspection of the abdomen shows a decided bulging below the line of the umbilicus. Palpation determines the presence of a hard movable mass about the size of a cocoanut in the left lumbar and umbilical regions. Fluctuation is easily recognized. Below this mass, entirely across the body, percussion gives flatness everywhere except in the upper zone of the abdomen. Vaginal examination elicits the fact that the uterus is of normal size, retroverted and probably free from the mass above.

Diagnosis: Multilocular ovarian cyst, for the removal of which we will do a laparotomy. An incision 4 inches long is made in the median line through the abdominal walls between the umbilicus and the pubis. This incision should always reach near to the pubis, so that when the tumor is delivered the pedicle can be easily handled and managed. It should be made quickly through the tissues of the abdominal walls down to the transversalis fascia without the use of a director, the eye recognizing the different tissues as divided. A good guide for the place of the incision is the dark line to be recognized in the skin between the umbilicus and the pubis directly over the course of the linea alba.

When the transversalis fascia is exposed it should be seized with a pair of dissecting forceps in the hand of your assistant and another pair in your own hand at points one-half inch from each other, and be lifted up from the subjacent tissues and then freely divided with the knife. This will expose the peritoneum, which should be seized in the same manner and also lifted away from subjacent tissues and freely incised. This can be done with safety and without fear of injuring the sac, or intestine, or omentum, or whatever else may be beneath it. Now, while talking to you these steps have all been taken and here is an opening in the peritoneum, out of which flows a little peritoneal fluid, warning us of the fact that the peritoneal cavity has been reached. Through this opening I can see the white glistening surface of an ovarian cyst; and this is the sight which always gladdens the heart of the operator, for when he sees this white glistening

tissue he knows that he has an ovarian cyst to deal with. The diagnosis is confirmed, as all other outgrowths of the uterus and its appendages are reddish in color. The opening in the peritoneum is now enlarged to the full extent of the opening through the abdominal walls by means of the scissors, using the fingers in the abdominal cavity as a guide to avoid wounding the intestines, or omentum, or bladder, should they be in the way. The cyst wall now comes up freely in the wound, so that it can be seen in all parts of the room. Some authorities advise, and many operators practice at this stage of the operation, the plan of introducing a sound or the hand into the abdominal cavity and over the surface of the tumor for the purpose of ascertaining and locating adhesions. I do not think it a good plan and never practice it. No attempt to separate adhesions should be made until they can be seen and are under perfect control, and this can be better done after the sac is emptied and its surface, with the adhesions, is drawn to the opening in the abdominal wall. The tumor is now held firmly against the abdominal opening by pressure from the assistant's hands from above and behind, which is kept up until the sac is entirely emptied. In this way the sac is kept in close contact with the edges of the wound, filling it entirely, so that no leakages of the contents of the sac can find their way back into the abdominal cavity. A large trochar, to which a rubber tube is attached, is plunged into the sac and the contents allowed to flow into a proper receptacle. Allow the contents to flow out slowly. As the tension of the sac wall diminishes, pressure from behind brings it through the wound, so that it can easily be seized with a pair of Neleton forceps and drawn out through the opening. As more and more of the sac comes out, there come into view different adhesions. Here, for instance, is a fold of omentum firmly adherent to the sac wall. It is secured by transfixion with a needle armed with a double ligature and tied in two sections; the ends of the ligatures are cut short. The omentum is cut through close to the tumor with the scissors. The cut surface is carefully examined to ascertain that the vessels are perfectly secured. If found satisfactory the stump is dropped into the abdominal cavity; if not, it is tied again. A sponge is placed under the omentum before division, to prevent any blood from entering the peritoneal cavity. Soft and recent adhesions are pressed off the surface of the tumor by means of a sponge. Vascular and old adhesions should always be ligated in two places and cut between them. And now, by a rather free pull, I have succeeded in forcing through the abdominal wound the large mass which was felt through the abdominal wall, and I find it to be an aggregation of multitudes of small cysts, rather unusual in its situation in being at the top of the tumor. Usually such accumulations are found near the pelvic portion of the tumor. The entire mass is now delivered, bringing the pedicle in plain view. It is made up of the expanded broad ligament and the Fallopian tube, much enlarged, running along its free margin over the surface of the tumor, and here we meet with a complication which must be handled with great care. A fold of the small intestine is firmly adherent for a distance of 2 inches along the edge of the pedicle. The tissues of the broad ligament, one-half inch away from the surface of the intestine, is transfixed with a needle armed with a double ligature, tied in halves, and the intestine cut away from its adhesion. The pedicle is now grasped in these long forceps and the tumor cut away.

The next point is to secure the pedicle. It is transfixed through its middle, selecting a non-vascular point, with a rather blunt needle armed with a double ligature of strong silk. The needle is detached, the threads are crossed, drawn around the halves of the pedicle and tied tightly, always removing the forceps before the knot is fastened, to be sure that the vessels are controlled by the ligatures. If all is satisfactory, the ends of the ligatures are cut short and the pedicle is dropped into the abdominal cavity, remembering never to pull upon the ends of the ligatures after they are tied, for fear of loosening their hold.

Now the abdominal cavity is to be cleansed thoroughly of blood and anything else that may have collected. The intestines are held out of the cul-de-sac of Douglas. These small sponges, fastened to handles, are used to remove thoroughly any discharge that may have gravitated into it. We are now ready to close the abdominal wound as soon as the omentum is pulled down over the surface of the intestines. A large flat sponge is introduced into the abdominal wound to protect the intestines and catch the blood coming from the needle punctures. The sutures for closing the abdominal wound are passed through the skin about one-half inch from the edge of the wound and include all the tissues of the abdomen together with the peritoneum. About three sutures for every inch in length of the wound are introduced in this manner. Now a very important duty, and one never to be neglected, is to be performed, and that is to account for all the sponges that have been used during the operation. The flat sponge is now removed and all the sutures tied, being sure to perfectly approximate the edges of the skin, so as to provide for early and secure healing and thus avoid, as far as possible, the dangers of the occurrence of ventral hernia. The wound is dressed dry with iodoform, iodoform gauze, borated cotton and a firm abdominal bandage. The patient is put into a bed warmed with bottles of hot water, the limbs are flexed over a pillow, and the shoulders are raised to relax the abdominal walls. The arti-

ficial heat is kept about the patient until reaction is fully established. No medicine of any kind is administered unless opium is required to relieve severe pain. I think this is best done by rectal injections of 30 drops of deodorized tincture as often as is necessary to control the pain. No food whatever is given for twenty-four hours. If vomiting is present, it is usually readily controlled by giving teaspoonfuls of very hot water. The bowels are moved on the third or fourth day by giving teaspoonful doses of epsom salts every four hours until the result is obtained.

Unless the temperature rises to 102° F., accompanied with other symptoms of trouble, the patient will not be disturbed in any way except as mentioned until the seventh day, when she will be brought before you and the stitches removed.

About the only preparation I make of my patients—and it is absolute with me—is to have the patient quiet for three days before the operation, on liquid diet, and to have the bowels thoroughly and effectually emptied of their contents by proper cathartic medicines. Twenty-four hours before the operation the patient has a general bath and a large $\frac{1}{1000}$ corrosive sublimate douche, followed by a large hot water douche to disinfect the vagina. The abdomen is thoroughly scrubbed and shaved, and an antiseptic dressing is applied, which is left on until the time of the operation. Five grains of quinine with one-fourth grain of morphia are given by mouth one-half hour before operation.

Without accident this lady will not be confined to her bed more than three weeks, and if all goes well she will be able to return to her home by the end of this time. A peer of the English government, during the ceremonies incidental to the laying of the corner-stone of a hospital, a few years ago, made the statement that Sir Spencer Wells had added 20,000 years to women's lives by the performance of such operations.

Notwithstanding the fact that the great majority of patients subjected to laparotomy for ovarian cysts when properly cared for, recover, still when asked if there is any danger attending the operation, be honest enough to say that there is danger.[1]

Case 3.—Miss E. A., Chicago, age 32, American, musician, general health good. This patient presents herself to us with a small painful tumor as large as a bean, on the back of the hand, between the second and third metacarpal bones. It has developed within the last six months, after prolonged piano practice.

It is a neuroma, and requires removal. The lady bravely consents thereto without taking an anæsthetic. It is exposed by a short incision directly over it, picked up with a pair of forceps and dissected away. Two catgut sutures, iodoform, iodoform gauze and borated cotton dressing complete the operation.[2]

Case 4.—J. C. H., Stonington, Ill., age 48, American, farmer. Family history good, patient well until he entered army at age of 20. This patient has had slowly but constantly increasing symptoms of locomotor ataxia, probably caused by exposure during three years' service in the war.

But he appears before us to-day for relief from disabling disease of the right knee-joint, which you can plainly see is very much enlarged and misshapen. Fourteen months ago he first noticed an unusual snapping and grinding in the knee during motion. There came on swelling of the knee and of the leg below as far as the ankle. The swelling of the leg gradually subsided, but the knee remained swollen and its distortion gradually increased, until now an examination shows it to be completely disorganized, movable in all directions, the ligaments apparently destroyed and every motion made in it accompanied with harsh, rough grating. It is also filled with fluid, which upon aspiration is shown to be reddish serum. He has had amazingly little pain in the joint itself, when one considers the amount of apparent destructive changes that have taken taken place. Yet he has complained, and does complain, of severe shooting pain throughout the leg, and especially in the upper one-third of the tibia, which you can plainly notice is much enlarged. The shooting pains spoken of are common to and characteristic of this general disease, for I take this to be clearly a case of Charcot's disease of the joint, a condition not infrequently present as a complication of tabes dorsalis. It is so named because Professor Charcot, of Paris, was the first one to thoroughly describe it. The most noticeable peculiarity about the disease is well illustrated in this case, in which these most destructive changes have taken place without correspondingly severe manifestation of their progress.

Believing the patient will be best relieved of his trouble by an amputation of the thigh through the middle, we will proceed to do that operation.

The limb was removed by forming the ordinary anterior and posterior flaps by transfixion. No antiseptic fluids or washes of any kind were used on the stump; it was dressed with dry dressing, iodoform, iodoform gauze, borated cotton. The thigh had been rendered thoroughly aseptic before the operation.

The joint was opened and displayed to the class; it displayed the characteristic appearance of a Charcot's joint—the fluid sanguineous, the articular ends of bones enlarged, that of the tibia being worn off as by a grindstone and much hardened.[3]

[1] The stitches were removed on eighth day, union throughout. Temperature has not reached 100° F., has felt comfortable, can move about in bed, and sat up on fifteenth day.

[2] The wound is dressed on the eighth day and found perfectly healed. The pain has disappeared.

[3] The patient was brought in on the eighth day and showed to the class for first dressing. The wound had healed throughout by first intention.

Case 5.—Miss R. Chicago, æt. 25, American, flower girl. General condition fair, family history good. This patient is suffering from persistent and apparently uncontrollable pain following excision of the knee for tubercular disease. The excision has been a perfect one and the recovery is complete, but the patient is prevented from following her avocation and demands an amputation of the thigh, in spite of advice and protests of physicians and friends.

Two operations for the purpose of dissecting out nerve fibres compressed in the cicatrices left after the excision have been made, but these failed to give relief. The amputation will be made as low down on the thigh as possible by means of two skin flaps formed from without inwards and a circular division of the muscles just above their base. You notice that in dissecting up these flaps I am very careful to take up with the skin the full thickness of the superficial fascia beneath it. This is to provide for the flap's nourishment. The blade of the knife is always made to cut transversely to the limb's axis in severing the tissues. In all flap amputations the sum of the lengths of the two flaps should be about 2 inches longer than the full diameter of the limb at the seat of section of the bone, so that they may be free from any tension or harmful retraction, and also to avoid a conical stump when the healing is complete. The amputation was made as described and dressed as the previous one. You will notice that in both amputations the flaps are approximated by continuous catgut sutures which bring the skin edges together neatly and accurately throughout the entire length of the wound.[4]

Case 6.—J. F., Chicago, æt. 3 years, poor health. This child comes before you with a well marked swelling of the dorsal surface of the hand principally covering the head of the metacarpal bone of the middle finger. The trouble is uncertain in character. An incision over the surface of it demonstrates it to be a tubercular abscess, connected with tubercular degeneration of the head of this metacarpal bone. I will proceed to curette the cavity freely and remove the particles of dead bone. It will now be washed clean and packed with iodoform gauze and the wound covered with borated cotton.*

Case 7.—Otto B., Missouri, æt. 15. This is a well-marked case of talipes equinus following infantile paralysis. There evidently has been an arrest of development in the right lower extremity of this patient, for it is much smaller in every way than the other one. The activity of the muscles has been restored, but in all probability his attempt to equalize the length of the limbs has been an element in the extreme contraction of the muscles attached to the tendo Achilles. All we can do in this case is to divide this tendon and place the foot at a right angle with the leg and fix it in that position by a plaster of Paris cast. This brings the side of the foot of this diseased leg two or three inches above the ground when he stands erect on the sound leg, so he will be compelled to wear a shoe sufficiently elevated to make the limbs of equal length. This will enable him to walk with much more ease and comfort.

In dividing the tendo Achilles introduce the tenotome through the skin an inch away from the edge of the tendon; pass it subcutaneously either above or below the tendon while it is relaxed; turn the cutting edge toward the tendon rendered tense by forcible flexion of the foot. A slight pressure upon the knife will divide the tendon readily. It is well to choose the narrowest part of the tendon for its division. It is important to avoid wounding the posterior tibial artery. All of this is done and you now see the foot comes easily to a right angle with the leg, and you notice as well the deep depression in the course of the tendo Achilles caused by the separation of the divided ends. This space will be filled up with connective tissue and the function of the tendon restored.[5]

Case 8.—Mrs. Catherine M., Chicago, æt. 52, Irish, housewife, general appearance good. This case presents for inspection an angry-looking growth about the size of a bean, situated over the triangular cartilage of the left side of the nose. The patient tells us it is growing larger and becoming more irritable. I deem it to be an old wart taking upon itself epitheliomatous degeneration. Its removal is advised and consented to. The tumor is included in an elliptical incision far enough away to be in healthy skin. Its depth extends entirely through the thickness of the skin.

The edges of the resulting wound are easily approximated by two sutures, making a linear scar entailing no deformity, dressed with iodoform gauze.[6]

Case 9.—A. T. J., Chicago, American, drug clerk. This young man presents himself with a swelling as large as a good-sized potato and very similar in shape, on the posterior surface of the upper part of the right leg. The growth evidently pushes all the muscles of the calf in front of it. It is hard and irregular to the touch where it can be felt underneath the edge of the muscles. It causes no pain or inconvenience except from its size. It evidently is an outgrowth, bony in character, from the posterior surface of the upper part of the tibia. It belongs to the class of innocent tumors and is technically called an exostosis. I cannot advise any operative procedure so long as it is harmless in its manifestation. Should it at any time become a source of trouble through in-

[4] On the eighth day the patient was brought before the class for the first dressing. Wound united, patient had been perfectly normal and free from pain ever since operation.

* Wound perfectly healed at end of five weeks.

[5] At end of two weeks cast removed, position perfect. Cast reapplied, to be left on for three months.

[6] On eighth day wound is united throughout.

creased enlargement I think it can be safely removed.

Case 10.—Mr. Wm. V., Chicago, æt. 47, English. This patient shows his hand with the little and ring fingers flexed into the palm of the hand and fixed in that position. When I attempt to extend them and examine the palm of the hand beneath them I feel a very readily a distinct band rise up under the palmar skin. This band is rendered very tense at every attempt at extension of the fingers. On either side of these bands are to be seen several small dimple-like depressions in the skin. This trouble is technically termed a case of Dupuytren's contracted fingers, and is a deformity resulting from injury to the fascia of the hand which produces a contraction of the connective tissue in and about the deep fascia. Its tendency to contract flexed the fingers and holds them immovable in this abnormal position.

The flexor tendons are not primarily concerned. The trouble was named after Prof. Dupuytren because he was the first to accurately describe the pathological conditions.

To overcome this deformity we introduce the tenotome and divide all of these resisting bands met with in succession as the fingers are forcibly extended. This is all done subcutaneously, as you plainly see; the hand in the first place having been rendered positively aseptic. The wounds are dressed with iodoform and iodoform gauze and the fingers bandaged in an extended position to a well padded splint.[7]

Case 11.—J. W., Chicago, age 30, Scotchman, machinist, generally healthy, well nourished. On examination we find that this man has a mass taking the place of the left epididymis of the same size and shape and of a cartilaginous hardness. Cases of this character and presenting this special feeling have in my experience proven to be tubercular. Based upon that belief this affection, however slight and simple it may seem to be, is of serious import to the patient. While it is present it is a constant source of danger from possible general tubercular infection. The only reasonable treatment to advise or pursue is total extirpation of the diseased organ. The patient does not consent to any such interference, and I did not expect him to, still I am quite well convinced that it is the safest procedure to adopt in this case, and is my duty to warn him of the the risks he runs with this centre of disease in his system.

As he will not consent to the operation suggested, we will prescribe such medicines as are supposed to have a beneficial influence on this disease. Bichloride of mercury of $\frac{1}{64}$ a grain, three times a day.

Case 12-17.—The six patients now shown to you are all illustrations of the enlargement of the thyroid gland, technically termed goitre, or bronchocele or struma.

The points in diagnosis are, first, its position in front of the neck; second, its shape, spread eagle, a small body in the centre and large wings on either side; third, it rises and falls with each act of deglutition, as I illustrate with this patient, because it is normally fastened to the trachea.

The growth may be unilateral, bilateral, or central, according as one or both lobes or the isthmus, or all three are the site of the manifestation of the disease. The growth may be cystic, single, or multilocular, adenomatous, vascular, or fibrous; or the tumor may be a sarcoma or a carcinoma of the thyroid gland. Again, we are often called upon to treat cases of enlargement of the thyroid gland associated with bulging of the eyeballs and distressing pulsation of the large arteries of the neck. Such cases are termed exophthalmic goitres.

The cases before us are all examples of cystic or adenomatous enlargement of the thyroid. We have fallen into the habit of treating these cases by the weekly injection into the substance of the gland of a drachm of the 5 per cent. sol. of carbolic acid in water. This treatment is followed by a rapid diminution in size in many cases, and a perceptible improvement in all who have regularly returned. I have added to this treatment the use of 5 drop doses of Donovan's sol. three times a day, with what benefit I am not yet able to state.

Case 18.—This patient returns to show the result after removal of two-thirds of the lower lip for epithelioma. The wound is perfectly healed and the deformity of the mouth very slight, when you consider how much tissue was removed.

[7] Two weeks after the above operation the little finger is in the extended position and movable. In the ring finger full extension is still not possible on account of a few more bands, which will shortly be divided.

MEDICAL PROGRESS.

ETIOLOGY AND TREATMENT OF OBSTINATE VOMITING OF PREGNACY.—In a paper read before the Académie de Medécine by M. GUÉNIOT, the author summarizes his conclusions as follows: The idea of combating obstinate vomiting of pregnancy with a single remedy or mode of practice seems to be quite erroneous, as its uselessness has been proved by experience. No one therapeutical agent has been shown to exercise a constant curative effect. This is as we should expect inasmuch as the obstinate vomiting of pregnancy is dependent upon a variety of causes arising from three organs or systems, first, the uterus, which at once is the very focus of pregnancy and a source of special excitement affecting the other organs. Second, the nervous system, (spinal and ganglionic) which by the aid of its

reflex power transmits the excitement to other organs. Third, the stomach, which is the seat and agent of the principal symptoms, and especially susceptible to uterine influences.

In order to treat these cases with assured success it is necessary to have recourse to a complex treatment which is directed to all three of the sources of the disorder, and hence there are three fundamental indications to be considered; these are, first, to reduce the morbid or abnormal uterine excitement by remedying the various pathological conditions which produce it. For this purpose belladonna, cocaine, morphine, vaginal injections, or topical application, the Gariel pessary, elevation of the hips with a sloping decubitus of the body, cauterization and even artificial dilation of the cervix are the resources which may be most advantageously employed, according to the necessities of each case. Second, to diminish the activity or suppress the exaggeration of reflexes, a result which may be secured by the use of chloral with the bromides, by the application of cold to the spine by means of ice or the ether spray, by moral influences, by descending galvanic currents, etc. Third, to combat the intollerence of the stomach by treating its various disorders and soothing its irritability by means of the following agents: Diet, almost absolute and rigorously enforced; the avoidance of all acid drinks, wine, orange and grape juice, etc.; the use of mineral waters, such as Vals or Vichy, and ice in very small quantities; blisters at the pit of the stomach; ether spray in the same region; the occasional use of laxatives or substances calculated to regulate the functions of the intestines.

Finally, to secure the full effect of such treatment, it is particularly essential to lessen the work of the stomach as much as possible, and with this in view, rectal hypodermic and endermic medication should be made available as far as possible. —*Bul. de l'Acad. de Méd.*

VARIATIONS OF BODILY WEIGHT IN TYPHOID FEVER.—Dr. L. H. COHIN, of Paris, has made valuable observations in the Cochin Hospital regarding the daily variations in the weight of typhoid fever patients. He found that the loss of weight per diem amounts to from six ounces to one pound. In convalescence the mean of daily gain was about nine ounces. The maximum of loss of weight corresponded to the end of the second week, or the beginning of the third. The investigator also established the fact that the patient lives at the expense of his own substance. His general conclusions are as follows:

1. Typhoid fever presents two distinct periods, one of loss and one of gain; certain accidental causes may modify them, but cannot effect their general character.

2. The daily loss is due to febrile combustion chiefly, and but little to abstinence.

3. The daily loss varies with individuals.

4. The losses in nitrogen and weight are almost parallel with the march of the temperature, without always following it exactly.

5. The study of the weight chart may aid in prognosis, a continual rise in the weight being a sign of convalescence.

6. The complications of the disease augment the loss of weight.

6. The study of the loss of weight enables the physician to determine with precision the action of nutritive substances in fevers.

8. The loss of weight in a typhoid patient takes place each day in a uniform manner.—*Boston Med. and Surg. Journ., Sept. 12, 1889.*

TONSILLITIS.—DR. G. F. BONCSEIN, of Baltimore, draws attention to the frequency of tonsillitis in children, quoting Dr. Chappel's report of 2,000 children examined in New York, among whom 13½ per cent. were found with enlarged tonsils. Regarding treatment, Dr. Boncsein advises *écrasement* with the electro-caustic snare or igni-puncture, with the sharp-pointed electrode, the latter method having the following advantages: 1. It is more easily managed, and 2, it causes a great deal less pain, and none after the preliminary application of a 4 per cent. solution of cocaine. The application is simple; under red heat the electrode is plunged into the tonsil to the depth of a quarter of an inch, held there for a moment and then withdrawn. A second and third puncture may be made at the same sitting; four to seven days must elapse between sittings, and from three to five sittings will be necessary to contract the tonsil. The after-treatment consists in the use of alkaline gargles. The only other local treatment used by the writer consists of poultices to the outside of the throat, inhalations of steam and incision when there is an abscess. As for constitutional treatment, he has employed salicylate of sodium with benefit in rheumatic cases, and benzoate of sodium to control the febrile element of the disease. He has no faith, however, in the curative or abortive power of any remedy in acute tonsillitis, which he believes to be a specific disease running an average course of three and one-half days in spite of all treatment.—*American Journ. Med. Sciences.*

TINCTURE OF EUPHRASIA IN ACUTE CORYZA.—DR. G. M. GARLAND strongly recommends the tincture of euphrasia in the treatment of ordinary colds. He finds that if given in the early stages the coryza is usually aborted, but that in advanced stages its effects are much less marked. The dose for an adult is ten drops every two or three hours. In infants and children the drug should be given in smaller doses well diluted.—*Boston Med. and Surg. Journal.*

THE
Journal of the American Medical Association
PUBLISHED WEEKLY.

SUBSCRIPTION PRICE, INCLUDING POSTAGE.

PER ANNUM, IN ADVANCE.....$5.00
SINGLE COPIES.....10 CENTS.

Subscription may begin at any time. The safest mode of remittance is by bank check or postal money order, drawn to the order of THE JOURNAL. When neither is accessible, remittances may be made at the risk of the publishers, by forwarding in REGISTERED letters.

Address
JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION,
No. 68 WABASH AVE.,
CHICAGO, ILLINOIS.

All members of the Association should send their Annual *Dues* to the *Treasurer*, Richard J. Dunglison, M.D., Lock Box 1274, Philadelphia, Pa.

LONDON OFFICE, 57 AND 59 LUDGATE HILL.

SATURDAY, DECEMBER 7, 1889.

MILK AS A VEHICLE OF TUBERCULAR INFECTION.

At the meeting of the Association of American Physicians at Washington, Sept. 20, 1889, Dr. HAROLD C. ERNST, of Boston, read an important paper on the question of the safety of using the milk of tuberculous cows for food. Although the possibility of contracting tuberculosis from this source has already been recognized, the danger has been generally supposed to be confined to the milk of cows whose udders were invaded by the disease. Dr. Ernst gives very strong reasons for thinking that there is not even this degree of security. His investigations were made under the auspices of the Massachusetts Society for the Promotion of Agriculture upon thirty-six tuberculous cows, which presented no evidence of disease of the mammary glands. The milk was examined for the tubercle bacillus, inoculations of the milk and cream were made upon rabbits and guinea pigs, calves and pigs were fed upon the milk, and, finally, thorough post mortem examinations were made on the animals which gave positive results. From the account given of the methods employed, the examinations would seem to have been made with great care, and with all due precautions against all possible sources of error. The results obtained were decidedly startling.

Tubercle bacilli were found in the milk and cream of ten of the thirty-six cows examined. Out of eighty-seven animals inoculated with milk and cream from fourteen cows, seventeen were infected from seven cows. Five out of twelve calves and two out of five pigs fed with milk from the diseased cows became tuberculous. Finally, tuberculosis of the udder was not evident to the naked eye in any cow examined, and in only one case was a single tubercle found by the microscope.

The bearing of these facts is obvious. If the danger of infection is anything like as great as would appear, the freedom of milk from the customary adulterations is a matter of trifling importance in comparison with the soundness of animals that furnish it. All the tuberculous cattle should be promptly slaughtered, both in the interest of the owners and of those whose health is endangered by them. In case of any doubt as to the quality of the milk supply, it would seem to be the part of prudence to guard against the possibility of danger from these sources by boiling the milk.

It cannot be claimed that KOCH'S discovery has contributed very much, thus far, to the therapeutics of phthisis, and it may be doubted if, rightly understood, it gives much encouragement to the search for a specific. It is not, perhaps, impossible that a poison for the bacillus may be found which will be innocuous to the system, but as a rule, what will kill the weeds will kill the crops. Nevertheless, the benefits of increased knowledge are manifest, even now, and it may not be over sanguine to hope that the time will come when, like leprosy and the plague, tuberculosis will be practically extinct in civilized lands.

RELATION OF ALCOHOL TO INSANITY.

The dependence of a large percentage of crime upon the abuse of alcohol is a matter of everyday observation, and the relation of cause and effect is no longer seriously questioned. The rôle that alcohol plays in the causation of insanity is for many reasons a much more obscure and difficult problem. The determination of the causal factors in any given case of mental alienation, even in so-called puerperal cases, is at best and necessarily but a summation of the probabilities. The facts upon which the decision is to rest are difficult to obtain and, when elicited, usually point to a number of predisposing conditions and a plurality of possible exciting causes. In American

communities the difficulties are amplified by the transition state of our populace. What to-day are hamlets, in a decade are towns, and in a score of years may be cities. All habits and modes of living may thus, for any individual, be widely varied within a short period, and who can estimate its influence upon the character and nervous organization. Besides, our population is heterogeneous in a high degree. The higher proportion of insanity among foreign born, as compared with those of native birth, influences averages for the worse and makes statistics misleading and of doubtful value. An opinion is current that insanity is greatly on the increase in this country, but this is not absolutely to be determined. Many cases such as formerly were cared for by friends or allowed to run at large are now placed in asylums and brought within the limits of statistical returns. The better care, treatment and protection of this unfortunate class has, during the past two decades, notably increased their longevity, so that the average duration of insanity has been lengthened nearly fifty per cent. Moreover, many are now placed under such medical treatment and control as can only be afforded in well-equipped institutions, who in former years would not have been admitted, and whose sanity would never have been questioned. Then the immigrant class, predisposed to a high insane average, are subjected to the toils and privations and hardships of newcomers, to which is added the potent depressing influence of separation from home and friends. From these various sources of error any deductions upon the question in hand derived from observations in this country would have but little reliability.

It is, therefore, with interest that we read the proceedings of the Third International Congress for the Study of Alcoholism, held in Paris last August. England, Holland, Belgium, Switzerland and some other countries were fairly represented, but on the whole the affair was distinctly French, and the observations and conclusions adopted pertain to France in particular, though applicable to other European States.

It was announced, and the statement was supported by Government reports, that insanity had increased nearly one-half in the past twenty years. The pertinent question is in regard to the cause of this appalling increase. In France, for instance, there is no considerable movement of population, not even by natural growth, the conditions of life and society are crystallized in the mould of tradition and custom, their hospital facilities are only enlarged upon urgent demand, and the care of the insane is about what it was twenty years ago, speaking from the standpoint of protection, supervision and asylum quarters. Their people are in a high measure of one nationality, for, outside of Paris, resident foreigners are comparatively rare. While then the population and general conditions have remained nearly stationary, insanity has wonderfully multiplied.

It was also shown, and the showing is again based on Government reports which are for this particular absolutely reliable, that the consumption of alcohol for drinking purposes had increased in almost the same ratio during this period of twenty years. These two facts taken together, suggestive as they are, would not justify hasty generalization. It may be urged that the tendency of insanity to increase from hereditary causes might account for the enlarged percentage of this unfortunate class. An increment from this source must undoubtedly be admitted, but a tendency to barrenness among those of well-marked hereditary neurotic taint has long been observed and acts as a fortunate though partial offset. Probably a history of the severer neuroses in antecedents and near relatives is obtained in cases of insanity as frequently as a distinct hereditary insane trace, and the question as to the dependence upon alcoholism of these diseases which seem to entail a liability to insanity is raised. Many authoritative writers and prudent observers consider such a relation to often exist.

A strong light is thrown on the situation by the fact that the increase noted in France is almost entirely made up by cases of alcoholism and general paralysis, the ordinary forms of insanity retaining approximately their former ratio. The same thing is true in a greater measure in Holland, where, of late years, alcohol distilled from potatoes has come into general use, the effect of which is said to be particularly harmful as compared with alcohol otherwise derived. It probably is in accord with the statements of a majority of trustworthy writers to attribute general paralysis to alcohol or the vices which are correllated with its excessive use. DR. GARNIER, in a paper read before the International Congress of Mental Medicine held in Paris about the same time, goes to

the extreme of attributing general paralysis solely to the abuse of alcohol, a position strongly combated in the debate which followed and which is not altogether tenable unless the widest latitude for indirect causation is granted.

The members of the Congress first mentioned manifested a marked unanimity of opinion in regard to the relation of insanity to the consumption of alcohol, and the following resolutions or views were adopted:

1. The increased consumption of alcohol is one of the principal causes of the development of crime and insanity.

2. A diminution in the number of drinking places being one of the means of reducing the consumption of alcohol, this Congress is of the opinion that Governments should take measures to restrict the number of dramshops.

Opinions were also expressed that crimes committed during the delirium of inebriety should not entail full responsibility but, on the other hand, that society should be protected against such drunkards by their being subject to sequestration in suitable retreats.

Whatever may be one's personal opinion, the expression of the above views, coming as they do from an intelligent body of men, must carry emphatic weight. It must be borne in mind that the members of this Congress probably never contemplated prohibitory legislation, that they live in countries where in some form alcohol is, as a rule, a part of the dietary, that in no way can the cry of fanaticism be raised, and that, in all probability, the great majority of them use alcoholics more or less themselves. This lends added importance to their action.

It is probably well within the limits of facts to consider the abuse of alcohol as not only capable of causing insanity, but as being a frequent cause of this the most distressing and wide-reaching calamity that can befall an individual or a family, and which imposes a heavy burden of tax and responsibility upon the commnnity at large.

AN ESSENTIALLY WOMAN'S HOSPITAL.—A hospital devoted to diseases of women and under the patronage of the Princess of Wales is to be established in England. The special feature of the institution is that all services to the patients, both professional and otherwise, are to be rendered by women.

LOCAL MEDICAL ORGANIZATIONS.

With a commonwealth that has within a century developed from thirteen States to forty-two; with a population increased from three to over sixty millions; in the midst of a people keen of perception and intensely practical in their estimates; with whom, in every department of learning, from that of the public school to the University, a high order of culture is possible, and where the varied industries are so well rewarded that ample means are at command, it is not singular that men in all the walks of life are keenly alive to their personal interests, and studiously intent as to the best methods of accomplishing desired results. Thus, our very industries are prolific of invention, and little heed is given to precedents. Every department of education is feeling a like strong impulse to the development of better and better methods of instruction, and the advances that have been made in educational methods within the last few years are simply marvelous. This impulse is at last taking strong hold upon the medical profession. Medical men are more and more dissatisfied, as well they may be, with the present professional status. The demand for better methods of teaching; for men better trained in preliminary studies; and for a much higher standard, to which they shall attain, before entering the medical profession—these are the prominent themes that point the pens of our best writers, and command the considerate judgment of our best thinkers.

The great problem which now confronts us, and which during the next twenty-five years must have its practical solution is this: how so to bring the standard of medicine from its present low state to that high plane, and the masses of medical men to that degree of culture where medical science shall find legitimate expression, and the art of healing render its best services to men, creating positions which men may hold as posts of honor, and up to which quackery and charlatanism may not climb. This is the requirement of the hour and of this age.

Science and art, and invention, are laying their contributions at the feet of the medical profession with a demand to be utilized in the interest of mankind. The dawn of a new century is upon us. Already the outlines of grand possibilities can be discerned. If at the present hour medical men shall prove themselves unequal to

their opportunities, then let there be no murmuring though the honors of our profession continue to trail in the dust, while charlatans run riot in their misrepresentations of medical science. But this shall not be, for the men are already upon the stage who will do valiant work in the saving of our profession from such humiliation.

There needs at this stage to be set forth not only a clear statement of the work to be done, such as shall command the hearty approval of a united profession, but secondly, that the means for successful accomplishment shall be used with utmost discretion. Whatever efforts the profession shall put forth for medical advancement in America, those efforts must be in full accord with the genius of American institutions. It is clearly manifest that legislation, and legislation only, can accomplish the desired result. With us that power of legislation vests with the people, and it is their voice which must first be heard before results can follow. For more than a century we have been accustomed to trust this people, and we can trust them now. Assure them fully as to what their best interests require, and needed legislation will quickly follow. We come then to the significant fact, that our present greatest need is that of medical men, who by ability and culture, and fidelity to their profession, shall be able to rightly educate the masses as to their common good, and so develop a healthful public sentiment. In this great work it is true that every able and highly cultured medical man will be needed as a standard bearer, but it is equally true that the burden of this work must fall upon the rank and file of our profession, as they shall mingle with the masses.

In the accomplishment of results so important men must act with intelligence and in harmony. Hence, the imperative need of efficient local medical organizations in every hamlet, town, city and county of every State in the Union. Each organization has a right to command the best of talent and the best of culture that the profession of that locality can contribute, and the duty of every medical man is only measured by his ability to rightly influence the body politic. Here lies the power that at last shall move the State. The vitality of local societies will determine the power and efficiency of State organizations. The delegations from the local societies will give to these the impetus of personal convictions, and State societies will only be what local societies shall choose to make them. And in this general work of local organization our medical journals can wield their power with great efficiency for good, and serving best the needs of the profession they shall serve themselves a well.

THE MEDICO-LEGAL RELATIONS OF ANTI SEPTIC SURGERY.

Shall Listerism be accepted as a criterion of the medico-legal responsibility of the operating surgeon? There are those who hold pronounced views respecting the status of antiseptic surgery, who virtually say that the surgeon who has not adopted it is not doing his best for his clients, and who seemingly would not find it difficult to testify against their a-Listerian brethren if or when called upon to give expert testimony in a suit for malpractice on this ground of the nonuse of antisepsis.

We shall not be surprised if some acute legal mind might seize upon this proposition and make trouble in the camp of surgery—or try to do so. That he shall be able to make good his case may well be doubted, or that the courts will fall into practice of measuring all surgery up to the enthusiastic views of some Listerians must be doubtful, also. However proudly the asepticians may feel, or however roundly they may boast in their lectures or addresses, there remains yet the time-honored dictum of generations of medico-legal experience: the surgeon "undertakes to employ a fair, reasonable and competent degree of skill."

The surgeon does not contract to furnish the highest possible degree of skill, no more than the physician contracts to make a perfect cure. He is not required to subscribe to any particular theory of treatment any more than he is expected to be the disciple of any particular school. He is to be true to himself and to exercise his attainments and powers to the extent of his ability; he is the practical exponent of the argument of POLONIUS when he declares to LAERTES that with self-truth he could not be false to any man. And a century of judges have ruled that way and have saved a world of loss and trouble to assailed practitioners. Wherever that line of judgment is departed from, if only temporarily, there it is likely that an epidemic of malpractice suits, under-

taken on speculation, will spring up. However enthusiasts may wonder at the laws delay in accepting their favored theory as a ground for legal decision, it is best to be lenient with that conservative trait in the legal character, for it has served the medical profession many a good turn in days gone by, and may do the same again whenever malpractice suits shall become fashionable. Like some fruits, medico-legal postulates take a long time to mature.

EDITORIAL NOTES.

HOME.

RECTAL TREATMENT FOR THE VERY POOR.—The New York Post-Graduate Hospital will hereafter have a special clinic for diseases of the rectum.

Dr. Charles B. Kelsey has been appointed to have charge of this clinic. He invites especially those who are quite without the ability to pay any medical fee, a deserving class, not infrequently who suffer from prolonged neglect. The more necessitous the case is, oftentimes, the greater the neglect, in this type of disease.

UNIVERSITY OF PENNSYLVANIA'S DEPARTMENT OF PHYSICAL EDUCATION.—The physical culture proffered, at the University of Pennsylvania, under the direction of Dr. A. H. P. Leuf, to the professional students, as well as the academical, is accepted more and more every year. When the professionals go into training for any of the athletic contests, they have the gymnasium fee remitted to them. In "The University," October, 1889, Dr. Leuf has an article on what he regards as some of the existing defects in college physical training, and their remedy. A winter-house for practice, to cost $5,000, is a pressing need, and he is actively engaged in the raising of funds for its construction.

FOREIGN.

SANITATION IN FRANCE.—A decree issued June 3, 1889, authorizes the city of Angoulême to negotiate a loan for the purpose of defraying the expense of improving the water supply of that city. The city of Alençon is also authorized to effect the same improvements. Beaune, (Côte d'Or) is authorized to contract a loan to pay for an improved water supply and for the construction of sewers. The cities of Sedan and Nice are authorized to improve the drainage by contracting a loan to defray expenses. Reims and Poitier have followed the example set them by the French capital as regards the sewage system and subsequent utilization in agriculture.

TRANSMISSION OF DISEASE BY BRUSHES AND DENTAL INSTRUMENTS.—A discussion recently took place at the Conseil d'Hygène concerning the transmission of certain diseases by hairdressers and dentists, the brushes and instruments being used in common for all their clients. M. Lancereauz wished to have stringent measures enforced, and cited a case of phthisis which Dr. Cochrane, an American dentist, alleged was transmitted by a dentist's instrument. M. Dujardin-Beaumetz and others declared that there were great difficulties in the way, but recommended great care in schools and public institutions.

VACCINATION IN JAPAN.—Vaccination, according to the *Medical News*, has been obligatory for some years in Japan, and every infant is required by the police to be vaccinated. The value of the procedure is, however, well recognized by the people themselves, and the government hospitals in every town are always thronged with applicants on the weekly "vaccination day." In 1886 there were 1,531 vaccinations to each 10,000 inhabitants.

INFECTIOUS DISEASES IN THE THAMES.—The *British Medical Journal* says, that Dr. W. Collingridge, Medical Officer of Health for the Port of London, in his half-yearly report, strongly recommends the erection of a small isolated building at the Port Sanitary Hospital for the accommodation of small-pox patients, who are at present treated in the same building as those suffering from other diseases. Referring to the dangerous position of training ships, which are without means of isolating infectious diseases in cases of outbreak, he recommends the establishment of a small isolated hospital for each ship. Reference was made to an outbreak of chicken-pox among the crew of a vessel after her arrival in London, three weeks after the first patient had apparently recovered, in consequence of which application was made to the Local Government Board to add chicken-pox to the list of disorders regarding which the Port Sanitary Committee have power to make regulations.

TOPICS OF THE WEEK.

LISTER'S NEW ANTISEPTIC DRESSING.

In an address delivered before the Medical Society of London on November 4 by SIR JOSEPH LISTER, Bart., F.R.S., Professor of Clinical Surgery in King's College Hospital, he gives in a most interesting manner the details of a series of experiments extended through several years, conducted with a view to determine what substances are most available for antiseptic dressings, and also to discover the most approved methods of their application. In this address he brings to the attention of the profession the double salt of the cyanide of zinc and mercury, as one having special claims to favor both as a germicide and for its inhibitory power as well. By the agency of starch the double cyanide becomes adherent to gauze and may be used with facility. Reviewing his experiences with this new dressing he says: "Such being the case I feel not only permitted but bound to bring this material under the notice of my professional brethren. As to the composition of this so-called double salt, it is for the present uncertain. This much is already established: that the cyanide of mercury is in very much smaller proportion to the cyanide of zinc than Watts' *Chemistry* would lead us to expect the double salt would give. But what the precise composition of the salt is we do not yet know. I am having it investigated by the Pharmaceutical Society, who have kindly undertaken the work."

Prof. Lister concluded his admirable address with the following words: "The sketch which I have given you of this investigation, though it has, I fear, wearied you conveys but a small idea of the toil it has involved, There are those who still believe that the use of antiseptic substances in surgical practice is always useless, if not injurious. The germ theory of septic diseases is indeed now happily established incontrovertibly. All now admit that septic mischief in our wounds depends upon the development of microörganisms in them derived from without. But the gentlemen to whom I refer are, more or less logically, disposed to trust everything to the antiseptic powers of human tissues.

"I believe I happened to be the first to direct attention to the antiseptic agency of living structures, and there is perhaps no one who attaches greater importance to it than I do. Without it surgery in former days would have been absolutely impossible. Still, I know too well from experience that it cannot always be trusted, and that the use of antiseptic adjuvants is in the highest degree important. And I have the satisfaction of knowing that there is among you a constantly increasing number who, when they have operated on an unbroken skin, with a fair field around for the application of their dressings, if they see septic inflammation occurring in the wound with its attendant dangers, know that it is their fault or the fault of the antiseptic appliances at their disposal. To those among you who are impressed with this conviction I offer the dressing which I have described as the most satisfactory that I have hitherto met with; and I venture to hope that you will regard it as a not unacceptable addition to your resources."

THE CAUSES AND PREVENTION OF INFANT MORTALITY.

At the recent meeting of the American Public Health Association in Brooklyn, DR. JEROME WALKER, of New York, presented a paper with the title named above, from which we make the following extended abstract. We only regret that we cannot present the article entire.

It is believed by many that the ratio of infants' deaths to the whole number of deaths in any community is a test of the healthfulness of that community. It has been repeatedly said that the public administration of sanitary measures in any city or town can be judged as to its efficiency by the rate of infant mortality in the city or town in question, and that a decrease in the mortality of infants means more efficient health authorities than hitherto. When I agreed to read a paper before this Association it seemed an easy matter to show that infant mortality has decreased of late years in this country, owing to an increased efficiency of health boards and other sanitary associations; but a study of statistics does not show either that the mortality has decreased in the country at large, or that the efficiency of health boards in general has increased sufficiently to be a strong factor in effecting a decrease. Notwithstanding these conclusions the prevalent high death-rate of infants, *i. e.*, of children during the period of the first dentition, is not a reflection upon sanitary science, for wherever the science and art of preserving health has had a fair chance, infant mortality has been reduced. We may agree with Dr. H. B. Baker, of Michigan, who says: "I have no hesitation in subscribing to the belief that much of the infant mortality could be prevented by thorough and enlightened action by local boards of health in cities and villages;" but we all know that this sort of action will not be taken until, by civil service or otherwise, men best qualified for positions on such boards get them, and will give that personal attention to sanitary details that the mere political doctor will not do.

Sanitary science will not have a fair chance until personal attention of qualified persons to sanitary details can be had, and this cannot be, in some cities, with the meagre appropriations made for the execution of health laws. The outlay for proper sanitary work seems enormous to the taxpayer, but a proportionate result justifies the expenditure. In my opinion the rapid advance that will be made within the next ten years in sanitation, and the training that the people will undergo, will materially lessen infant mortality. As an evidence of this are the following facts: In Brooklyn, in 1878, the population was 531,100. There were 11,075 deaths from all causes. Of these deaths 5,294 were among children under 5 years of age, and 2,943 of children under 1 year. In 1884 the population was 644,526; total number of deaths, 14,116; of children under 5 years of age, 6,271; under 1 year, 3,924. In 1888 the population was 794,682; total number of deaths, 18,061; of these 4,944 were among children under 1 year of age, and 3,075 of children between 1 and 5 years.

To rear a child now-a-days so that it shall have a healthy mind in a healthy body is more difficult, probably, than it was fifty years ago. As wealth increases, poverty increases and the susceptible baby suffers.

Worry, anxiety, insufficient food, over-feeding, insufficient sleep, coddling, exposure, all bring with them dangers to health. Among the causes of sickness which seem to be growing stronger are the over-heating of houses, frequently with air deprived of moisture and laden with gaseous impurities from contact with cracked and over-heated furnace pots, over-feeding with prepared baby foods, sweet crackers and dainties, the relegation of the care of children to nurses, many of them tricky and incompetent, an increased susceptibility to nervous complications and disorders, and artificial feeding instead of natural nursing by the mother. "Why," asked the late Prof. Charles Buckingham, "do American born females make such poor wet-nurses compared with the immigrants from Ireland or Germany? After nearly thirty years of practice I cannot answer the question. That it is a fact, few practitioners in our large towns and cities doubt. . . The consequence of the early failure of the supply of breast milk is the early attempt to fit the stomach for other food. Add to this the parental pride which interferes for the poor pleasure of seeing a toothless child swallow the food of an adult, and you have for the result cholera infantum, dysentery, convulsions, tabes mesenterica; and if, by reason of extra strength, the child passes the first dentition, it is more likely to be cut off during the second, or to become later a dyspeptic or even phthisical. . . The fact has become more and more apparent that large numbers of women cannot nurse their children, and those who are beginning to constitute the exception. Formerly this inability was not so common, occurred only occasionally, and, when partial, did not attract attention."

Take this true statement of Dr. Buckingham in connection with the following extracts from the writings of Drs. Nathan Allen and Elisha Harris, together with the fact that a considerable number of physicians now-a-days advocate, for various reasons, artificial feeding in preference to natural nursing, and we have an important factor in the increase of infant mortality and one which boards of health cannot well reach. "The type of a good nurse," says Dr. Allen, "is a woman with a sound and healthy body evenly balanced in all its parts. There should not be a disproportionate development in any of the organs or systems of the body. Heredity and the mode of living of the average woman produces an excess or deficiency in nervous or muscular force and an undue development of the lymphatic organs. Among the causes are educational pressure, constant excitement, depression of spirits, too much society, hard work, great exhaustion, etc." In 1874 Dr. Harris wrote to a special committee of the Board of Supervisors of Kings County as follows: "The three great private charities in New York city that receive newly born infants and also provide, to some extent, lying-in wards, admit, in the course of the year, about 1,900 newly-born infants. The rate of mortality in the groups of infants whose mothers (however poor or however young) tarry to nurse their offspring has been, during the past four years, just about 14 per cent., while in the hired wet-nurse class the rate of death averages about 27 per cent., and in the strictly foundling and orphan class, that are bottle fed or spoon fed, the rate is 70 per cent. dead in the first year and 90 per cent. before the end of two years. The causes in general of infant mortality are: First, hereditary, viz: syphilis, scrofula, tuberculosis, excessive nervous irritability, etc.; second, those due to the child's environments, too little or too much care, exposure or over-protection, insufficient or too much food. These causes result in dyspeptic ailments, intestinal disorders, contagious diseases, marasmus, convulsions, capillary bronchitis, pneumonia, etc. While "general debility" is not considered as a separate and distinct affection, the term is a convenient one to use to designate that condition which follows, especially in our cities, many cases of intestinal disease. Whooping-cough, measles, scarlet fever and diphtheria or that is in the child at birth. Muscular and nervous debility are too frequently associated with the ailments of children now-a-days. This being so, there is more need of recuperation in the summer than heretofore.

How to correct the mode of living among the ignorant demands the wisest thought of the wisest minds, because this would be to reach the roots of the fearful mortality among them. Tenement house laws and health ordinances have their place and should be enforced, but these only reach the border land, as it were, of the difficulty. Within the apartments where the family life goes on is where the laws of health are really broken. It is here, I conceive, that a health officer finds his most important function. It is his by repeated visitation, by wise suggestion, by personal influence, by creating the conviction that he is a friend, so his coming will be welcomed and his advice heeded—by all these and many other means at command—to reach, impress and control the minds of the ignorant masses. Parents can be taught how to sterilize milk, why and how litmus paper should be used as a test for acidity of milk, the value of cereal foods, how they should be cooked and how made palatable, the evils of an excessive use of sweet crackers, animal crackers especially; how the frequent use of head to foot ablutions (as Dr. Edwin Chadwick calls these baths) aid in the maintenance of health and the prevention of sickness; how bedrooms and living rooms can be easily ventilated; why garbage and excrement should not remain in and about the house to offend the senses of sight and smell and to poison the atmosphere; why food should not be kept in bedrooms or bathrooms and near water-closets; why diapers and underclothing soiled with urine should not be dried by the fire in the living-room; what is the use of vaccination; how proper preparation and cooking will render certain cheap, coarse and tasteless foods nutritious and palatable.

Some families might ignore or repel these, and other practical suggestions, but many would welcome them. Boards of health can and should see to it that the drinking-water is ample and good, that milk is at least quite pure and not furnished by cows fed on sour garbage or distillery slops, and kept in unhealthful stables; that house garbage is promptly removed; that plumbing is as it should be; that the sewers are properly flushed and disinfected; that contagious diseases are studied and their spread prevented as far as possible by isolation and

notification to the people; that houses are not overcrowded, and that every facility is afforded for the building of model tenements. The hardworking, conscientious health officer has a wonderful opportunity to save life and increase the comfort and usefulness of the people. If the whole of parentage does not consist merely in loving one's child, but in good blood or heredity, proper food, intelligent care and untiring devotion, the more frequently we can use these factors in the management of institutions for children the better, and the smaller will be the mortality. But what do we find in too many institutions? We might say of some of them, as Florence Nightingale did in 1863 of hospitals: "Strange though it seems, it is quite necessary to lay down the principle that the very first requirement in a hospital is that it should do the sick no harm." There is overcrowding—partly because of a desire to outrival in numbers similar institutions, partly because of insufficient means to extend accommodations, and too frequently because of a niggardly economy, which prohibits a proper supply of food, the employment of intelligent and faithful attendants, and the expenditure of sufficient money to provide proper ventilating and bathing facilities. Though many of the inmates of these institutions come from the lower walks of life and may not have had the best of care at their homes, there is no excuse for cutting off a necessary supply of milk—the most valuable food of childhood—because it is agreed that the expense of running the institution must be lessened; neither is it right to have the floors wet or damp a large part of the time, in the attempt to have them clean. On no ground, other than selfishness, can the practice be defended of sending children who are expected to die out of an institution, so that the published death-rate of the institution shall be small. Such action does not prevent death, but often accelerates it. For what, pray, are institutions for children established unless to care for the feeble, sick and dying as well as for those in health, and to give decent burials if necessary? Careless and prolonged bathing of puny infants in cool or damp rooms is responsible for many a death from capillary bronchitis. Hard and uncomfortable beds, often teeming with vermin, a scarcity of towels and handkerchiefs, the placing of children with gastro-enteritic affections, it may be, in the same room with babes having purulent ophthalmia, the insistence upon one woman wet-nursing two infants or having charge of fifteen or twenty little children, a job sufficient to tax the energies of three or four women, the persistent and often underhand opposition to the directions of qualified and fair-minded medical attendants, whose sole aim is to diminish by every means possible a high rate of infant mortality —all of these things are hindrances to the maintenance of health. The bane of too many institutions is too many trustees, and there is a clashing of directions.

The late Professor Dunster, in his report of 1870, showed that owing to no overcrowding, fewer epidemics and better hygienic conditions, infant mortality at the Infants' Hospital, Randall's Island, had fallen in 1868, '69 and '70 from 55.06 per cent. to 46.83 per cent., and then to 36.41 per cent. He believes that unpaid labor is very expensive and deprecates pauper labor in such an institution, for it does not furnish the "unremitting, judicious and proper care that is needed." In this connection it is well to state the conclusions of the late Dr. Elisha Harris (Letter to Investigating Committee of the Board of Supervisors of King's County, etc., 1874): "The private institntions can save 85 per cent. of mothers' infants and 65 per cent. of hired wet-nurse infants as those institutions are now managed, and it is possible to do much better. . . . The mortality in children past 1½ years of age ought not to exceed 5 per cent. in those under 5 years of age and 3 per cent. of those between 5 and 10 years of age. . . . If in any alias nursery the rate of mortality exceeds 22 per cent. of the infants under 1 year, 10 per cent. in the infants between 1 and 2 years of age, and 6 per cent. in those from 2 to 5 years, and over 3 per cent between 5 and 10 years of age, there is some culpable fault somewhere, and such faults are of the kind that make puny children and insure an increase of pauperism and public burdens."

We may conclude from what is known of institutions for children:

1. That a large proportion of the deaths in them are preventable.

2. That the younger the children, and the larger the number, the greater the mortality.

3. That the mortality can be lessened, but the decrease costs money, time, patience and energy, and to obtain the best results the attending and resident physicians should be reliable, should be given control of all medical and sanitary matters, and should be held responsible for the same.

PRACTICAL NOTES.

RECURRENCE OF CANCER OF THE BREAST AFTER AMPUTATION.

From microscopic examinations of carcinomatous mammæ amputated by Professor Küster, according to the *Lancet*, DR. HEIDENHAIN predicted a return of the cancer in twelve cases, because parts of the morbid growth had remained in the wound. In the other cases he diagnosticated a radical cure, which diagnosis had proved correct up to the date of the publication of his paper, because the operation had removed the whole of the morbid growth. The usual cause of the recurrence is that only microscopic parts of the gland or the tumor remain on the surface of the pectoralis major. In thin women the whole mammæ is firmly attached to the muscle, but in obese subjects small glandular lobules are generally attached to the fascia between the mammæ and the muscle, so that in amputation above the muscle small particles of the gland may easily be left. Every mammæ in which a single cancer node is found, according to Heidenhain, is largely perhaps *in toto*, diseased. He found the epithelial cells of the acini proliferating in all parts of the mamma, and observed hypertrophy of the per-

iacinous connective tissue, and he believes that these acini remaining in the wound form the origin of the late secondary growths. In the retro-mammary fat there are, side by side with the blood-vessels, lymphatics leading from the mamma to the subjacent fascia, and the latter were, in two-thirds of the cases, full of metastatic cancerous masses. The pectoralis major itself is only affected when a metastatic cancer-node invades the muscle from the fascia, or the original tumor attacks it by its own simple growth. Heidenhain concludes that to make amputation of the mamma more successful it is necessary, even in freely movable carcinomata, not only to remove the whole mamma, but also a superficial layer from the whole of the pectoralis major, and, in tumors which are closely connected with the muscle, to entirely extirpate the latter.—*Boston Med. and Surg. Journal.*

TOBACCO IN FRANCE AND GERMANY.

A congress was recently held in Paris to protest against the abuse of tobacco. Explaining why the German who smokes more than the Frenchman poisons himself less, M. Ortolan said that the percentage of nicotine in tobacco is less when the stalks grow closely together and when the leaves are numerous and placed low on the stalk. Hence, in Germany where tobacco growing is unrestricted, the amount of nicotine is less than in the French tobacco, where the industry is regulated by government and the number of leaves to the stalk is limited. French tobacco contains as much as six per cent. of nicotine.—*The Pharmaceutical Era.*

FOR YELLOW FEVER.

DR. STERNBERG strongly recommends an alkaline treatment. He tried a formula containing 150 grains of bicarbonate of soda and $\frac{3}{10}$ of a grain of corrosive sublimate in a quart of water in twelve cases, and all recoved; while of eight cases otherwise treated in the same Cuban hospital, five died. He gives a small wineglass (1¾ oz.) of this mixture, ice cold, every hour.

PERSISTENT VOMITING.

Persistent vomiting, especially that of pregnancy, is often most difficult to overcome and baffles every effort of the physician; indeed, several fatal cases have been lately reported. Dr. Blumensandt, in *L'Union Médical*, says that he has found the following formula invaluable in such cases:

℞ Hydrochlorate of cocaine . . . . . 3 grs.
Tincture of anise . . . . . fʒijss.
Spirits of menthol . . . . . fʒijss.
Linden-flower water . . . . . fʒv.
Syrup of cinnamon . . . . . fʒj.
℥

A dessertspoonful to be given every hour until the vomiting has ceased.—*Med. News.*

CINCHONISM AND MEANS OF PREVENTING IT.

DR. COGLITORE, in the *London Medical Recorder* of August 20th, after enumerating the principal symptoms of poisoning by quinine, says that in cases of toxæmia no good is obtained from various other remedies employed as substitutes for quinine (arsenic, salicin, eucalyptus, etc.). He finds that quinine is always well borne if given with ergotin and opium. This is his formula:

℞ Sulphate of quinine . . . . . grs. xij.
Bonjean's ergotin . . . . . grs. v.
Opium . . . . . gr. j.
℥

Make into three powders, and give at intervals of one hour.

Given in this manner, quinine succeeds in the gravest cases and gives rise to no symptoms of cinchonism.—*The Medical Age.*

ANTIPYRIN IN CONGESTIVE MALARIAL FEVER.

It is alleged that antipyrin is about to prove an invaluable adjunct to quinine in the treatment of the severest types of malarial fever. From a trial made in a very malarious district of Greece this new use of the drug bids fair to become one of its most beneficial. The significant point in regard to its interaction with quinine seems to be that the antipyrin can be given in the pyrexia, or at any stage when the case is seen. Valuable time may in this way be saved while waiting to introduce the other drug in the advance of the next ensuing pyrexial onset.

MENTHOL IN PRURITIC AFFECTIONS.

Menthol is highly recommended by SAALFELD, Berlin, in cases of pruritics of various kinds. He prescribes it either as a wash or as a salve, the formula being:

1. Menthol . . . . . 22–37 gr.
Spirit vin. rect. . . . . ʒj⅔.
2. Menthol . . . . . 37 grs.
Ol. Olivarum . . . . . (ʒij–ʒiij.)
Lanolin . . . . . ʒj⅔.

Both preparations have done him excellent service in urticaria, pruritus cutaneus and pruritus senilis.

PRESCRIPTIONS FOR THE ADMINISTRATION OF CHLORALAMID.

In the *Therapeutische Monatshefte* for October, DR. A. LANGGARD gives the following formula:

℞. Chloralamid. . . . . gr. xl.
Acid. mur. dil. . . . . ♏ v.
Syrup. simplex . . . . . fʒijss.
Aq. dest. . . . . fʒij.
℥.

This may be taken at one dose.

Used as an enema:

℞. Chloralamid. . . . . gr. xl.
Acid mur. dil. . . . . ♏ ij.
Alcohol . . . . . ♏ xv.
Aq. dest. . . . . fʒiijss. ℥.

—*Med. News*, November 30, 1889.

SOCIETY PROCEEDINGS.

Medical Society of the District of Columbia.

Stated Meeting, April 3, 1889.

THE PRESIDENT, CHARLES E. HAGNER, M.D., IN THE CHAIR.

DR. C. H. A. KLEINSCHMIDT presented *Specimen of a Complete Ovary at the Sixth Month of Gestation.*

DR. A. F. A. KING reported the case of

A CHILD EIGHT MONTHS OLD SWALLOWING A SAFETY-PIN.

On the morning of July 24, 1888, an infant boy, 8½ months of age, swallowed an ordinary metal safety-pin, measuring when closed one and one-sixteenth inches between its rounded ends; when open, the point diverges from the body of the pin five-eighths of an inch. It was opened when swallowed. On the morning of July 28, the rounded end of the pin, opposite the point, began to protrude from the anus, and was extracted by the fingers of the mother.

The mother relates that at the time of the accident she had just removed the pin from the child's clothing and stuck it carelessly in her dress over the neighborhood of her breasts, from whence it fell into the infant's mouth. She stated that the child acted as if he wanted to throw up and "choked as she had never seen him choke before." She passed her finger into the mouth, but could not touch the pin. In the absence of medical advice, a teaspoonful of castor oil was administered and retained. The child had for some months been "bottle fed," and was also allowed to eat bread and milk. A physician (whose name I do not know) ordered the same diet to be continued, adding thereto slipperyelm water as a drink, and directions to keep the child quiet.

The child suffered but little uneasiness until the third day when fretfulness and indications of pain, gradually increased, and got still worse during the night preceeding the fourth morning, when, while having an action from the bowel, the mother discovered the pin and removed it from the anus as previously stated. The infant at once became easy; had a prolonged sleep; and no ill effects have since resulted from the accident.

The case, I think, is of interest, chiefly from the remarkable good luck which determined the pin to keep going right end foremost in its circuitous route through the alimentary canal. As long as the projecting point continued to look backwards, it could pass quite as easily as a copper cent., which latter measures three-fourths of an inch in diameter, and is therefore one-eighth of an inch wider than the diverging extremities of this open safety-pin.

It is quite probable that the passage of the pin, after it had reached the stomach, was painless, and that the pain and fretfulness during the third and fourth days were produced by the foreign body, impinging upon the sensitive sphincter ani.

If the anus had been explored during the third day, possibly the pin could have been extracted twenty-four hours sooner than it was, and much suffering by the infant and worry of the mother prevented.

I ought, perhaps, to state that I have never seen this child. I had treated the mother, before her marriage, for stenosis of the cervix, and the happy result of Goodell's method of rapid dilatation, after some years of menstrual pain, so impressed the patient, that her first thought, when the child swallowed the pin, was to send to me for advice. I ventured to predict that the pin would probably pass without injury, and told her to do nothing, but assist the exit of the foreign body if it should lodge within the anus. Some weeks later, she wrote me that the pin passed all right, and afterwards at my request, sent me the more prolonged account from which I have gleaned the facts presented in this paper, and which, from my knowledge of the lady, I feel quite sure may be relied upon.

DR. SMITH thought the report of the case introduced a very interesting subject for discussion. Some years ago a child had been brought to his house because it had swallowed a penny; he advised the parents to let it alone; and in a few days the coin was passed from the rectum. A few days ago a doctor brought his own child to Dr. Smith's office, and stated that it had swallowed a metal whistle about an inch in its largest diameter. He advised the father to allow it to pass without administering cathartics, and the foreign body was passed from the rectum the next morning without any discomfort to the patient. He was surprised at this because the diameter of the whistle was so much greater than that of the anus. Some years ago he had been called to see an infant, and learned from the mother, who was greatly distressed, that it had swallowed an ordinary rubber nipple. He did not believe the history, and Dr. W. G. Palmer, who came in while he was there, coincided with this belief. They advised the mother to let the infant alone, and went home. Shortly after they received a message that the nipple had been found on the floor. The important question to determine is whether the child has swallowed a foreign body. In many instances the parents become alarmed because they cannot find articles, and immediately conclude they have been swallowed.

THE PRESIDENT reported a case similar to that reported by Dr. Smith, where a colored child

about 7 years old, had swallowed a whistle. Dr. Gilbert brought the child to his office, and it located the pain about the lower end of the œsophagus. Dr. Hagner passed a probang and felt the foreign body and pushed it into the stomach. As it passed through the cardiac orifice there was a distinct whistle. Some days after it was passed from the rectum without any inconvenience.

Dr. Thompson had recently seen a boy who had swallowed a whistle. There was no suffering; but he rejected food soon after taking it; and there was a peculiar noise on sleeping. He gave him some water, but it was regurgitated in a few seconds, which led him to believe the foreign body had lodged in the œsophagus. He tried to pass the probang, but the child was so obstreparous that this failed. He told the parents to bring it back again, but as he had not heard from them it was probable that some other doctor had been consulted. Pennies are frequently swallowed. He had removed three from the rectum of a child in the Children's Hospital; they had been there for sometime. It is very singular that so little serious effects result from swallowing foreign bodies.

Dr. Sothoron said that his son had swallowed a whistle, but had not suffered from it although it was about the size of a nickel. He gave him a dose of castor oil and the whistle was passed in about four days. About a year ago he had removed a pin from the rectum of a child; it was located two and a half or three inches from the anus and was at first supposed to be bone.

The President thought it would be well to consider the removal of foreign bodies lodged in the œsophagus and trachea. If the body is lodged in the œsophagus should it be drawn up, pushed into the stomach, or should cathartics be given? If the fæces are solid the body may become surrounded and pass through the alimentery canal without doing any harm; but if the fæces are liquefied by cathartics the fluid will pass the foreign body and allow it to lodge in the tract. Consequently he favored the use of constipating food until the body was passed. Sometime ago Dr. Peter brought a patient to him because a foreign body had lodged in the œsophagus. He introduced an umbrella-shaped probang, and removed a large piece of meat through the middle of which was a large pin. How the pin got there no one knew.

Dr. Caldwell: The President in speaking of the inadvisability of cathartics in patients who had swallowed foreign bodies would probably explain a case seen by him sometime ago. The mother stated that the child had swallowed a brass button, and had administered emetics before she sent for him, but the body was not ejected. He did not think the child had swallowed it, but nevertheless ordered several doses of castor oil without any perceptible effect. In about two weeks the button was passed from the rectum. He now thought the fecal matter was probably liquefied and passed by the foreign body without disturbing it.

Dr. J. Ford Thompson: Dr. McArdle had seen a case of typhlitic abscess with him sometime ago in a young woman several months' pregnant. He had declined to operate because the woman was dying. At the post-mortem a large black pin with a broad head was found in the appendix, the point having punctured the abscess wall. He had operated to-day for the same condition in a young lady about 20, who had swallowed a piece of a writing pen about seven years ago. He explored the abscess, but could not find any foreign body. Artificial teeth are sometimes swallowed and become impacted in the œsophagus, when it is quite impossible to dislodge them except by œsophagotomy. Usually foreign bodies pass to the lower part of the œsophagus when œsophagotomy is impossible. In such cases gastrotomy would be indicated and is occasionally performed. Many times very large foreign bodies pass through the alimentary tract without doing any harm; on the other hand very small ones, as seeds, pills, etc., will cause obstruction or fatal inflammation.

Dr. Samuel C. Busey reported:

A CASE OF EXOPHTHALMIC GOITRE TREATED SUCCESSFULLY WITH SULPHURIC ACID AND STROPHANTHUS.

In the *Medical News* of Nov. 3, 1888, Dr. W. E. Magruder, of Olney, Md., reports the "successful treatment of a case of exophthalmic goitre by sulphuric acid." The case presented the usual symptoms of the disease, "enlargement of the thyroid gland, with decided pulsation, protrusion of the eyeballs, palpitation of the heart, frequent pulse, anæmia, etc." After trial of various remedies usually given in such cases, he prescribed the aromatic sulphuric acid in combination with digitalis and ergot, from which the patient derived much benefit, but in consequence of its disagreement with the stomach, the ergot and digitalis were discontinued, and 20 drops of the aromatic sulphuric acid was given every four hours. Her improvement was more rapid, and finally, a complete cure was effected. Dr. M. attributed the successful result of the treatment to the tonic influence of the acid upon the vasomotor nerves.

In The Journal of the American Medical Association of the same date appeared a contribution by Dr. D. R. Brower, of Chicago, entitled "Exophthalmic Goitre, and its treatment by Tincture of Strophanthus," in which he reports several cases treated with this drug, resulting in cure. In one case the patient had been under the ordinary treatment for three months "without any

abatement of the symptoms." In the second case the patient, a female, aged 52, had suffered with the disease for eighteen months. He refers also to a case treated by Dr. Bridge with strophanthus and tonics, with rapid recovery, and to a case in which Dr. Ingals had employed the same remedy with marked benefit.

During the week succeeding the appearance of these reports I was called to see a young lady suffering with the disease. In her case the cardiac and thyroid symptoms were well marked. The exophthalmos was perceptible, but not prominent. It was more marked in the absence of harmony in the movements of the eyeballs and upper lids than in protrusion of the eyeballs. The right side of the thyroid gland was much larger than the left, but the enlargement at the base of the neck compelled her to enlarge her collars and to loosen the neck bands of her clothing. Her pulse was frequent and excitable, complained of palpitation and difficult respiration, especially when ascending steps. Slept badly, sometimes lying awake all night, was nervous, irritable, anæmic, without appetite, constipated, and had a slight cough. In general appearance she looked like one suffering with phthisis pulmonalis. I ordered two drops of the tincture of strophanthus every six hours, and ten drops of aromatic sulphuric acid every four hours, an easily digested and nutritious diet, food to be taken during waking time every four hours, early retirement and remaining indoors during inclement weather and after sunset. The course of treatment was twice interrupted, once by the illness and death of a member of the family, and again by a severe attack of bronchitis, induced by indiscreet exposure in making a visit to the cemetery. Improvement was manifest soon after the beginning of the treatment, and now she seems to be perfectly well, with entire disappearance of the thyroid enlargement. The action of the heart is good, her appetite is excellent, bowels regular, sleeps well, is bright and cheerful. She is vigorous, with rosy cheeks, and a gain of twenty-five pounds in weight.

Whilst the result has been as satisfactory, the progressive improvement in this case was not as rapid as in either of the cases reported by Drs. M. and B., probably because the drugs were not given in as large and increasing doses. The plan of treatment established at the beginning was persistently pursued to the end, with the exception of the interruptions referred to.

DR. W. W. JOHNSTON, in opening the discussion, said: There was probably no disease in which the treatment sometimes accomplished so little good as exophthalmic goitre. The cases may be divided into two classes, viz., first, the subacute, which are the most curable and yield promptly to vigorous treatment, the principal element of which is rest; second, the chronic, which may be subdivided into two varieties, those which are curable and those which are not. As the successful remedies used are often empirical ones, and those given in obedience to a theory frequently fail. He believed exophthalmic goitre to be a disease of the central nervous system, leading to congestion of the thyroid gland, of the fundus of the eye, and to cardiac disturbances. It is analogous to physiological and other pathological congestions.

The regulating vaso-motor centers are disturbed, leading to local congestion. It is not known why this congestion should take place in the orbit and thyroid, but it follows the disturbance of certain nerves. The lesion is undoubtedly in the medulla oblongata, and acts upon the pneumogastric and vaso-motor nerves. The only effectual remedy to accomplish any good should go to the seat of the disease. As we have no such agent we resort to those which act by relieving the distressing symptoms and local congestions. Hence the use of ergot, which acts upon the pathologically dilated peripheral vessels. Ergot is said to have proved valuable and favorable in the cases reported. Then there are those remedies which act upon the heart by regulating its disturbed action. There must be two distinct pathological conditions, as the thyroid and cardiac symptoms are not always associated, and ergot and heart-calming remedies are both called for. The action of the heart is the most serious symptom, as it disturbs the blood supply to the various organs and enfeebles digestion. In the experiments with strophanthus it has been shown that it slows and then enfeebles the heart's action if it is pushed to its full physiological effect. This slowing of the heart is important, and we may expect more from strophanthus than digitalis.

He had seen quite a number of cases. In one, an acute case, the patient was put to bed and kept quiet; digitalis and ergot were administered and recovery took place in three weeks. In another, a lady, the heart's action was feeble and the exophthalmia marked. Absolute rest was enjoined and ergot and digitalis administered. She recovered and is now well. In another, a female school teacher, all the symptoms were well marked. She was afterwards under the care of Dr. Weir Mitchell who treated her principally by rest and galvanism. She afterwards went to Atlantic City and gained very much in a short time. Rest is the most important part of the treatment, and no method will prove effectual without absolute rest of mind and body. Some patients are irritable, others hysterical, and a few have delusions. In these cases there is some congestion of the brain. Electricity has been warmly advocated by some but had not proved beneficial in his cases, either as a local application or general tonic. He hoped we had found in strophanthus a new and valuable remedy, and thought

it should be pushed until some decided effect was seen, as in small doses it seemed to be of little value.

DR. MURRAY asked Dr. Johnston the duration of treatment in his favorable cases.

DR. JOHNSTON: The cases were subacute and were cured in about six weeks. In some the treatment had extended over several months, but was not persistent. Improvement was steady after rest was secured. Many chronic cases do not get into our hands until numbers of physicians have treated them, so it was impossible to fix the time of their duration under any plan of treatment.

DR. MURRAY had asked the question so that he could compare results and form an idea of the value of the new treatment.

DR. TONER had seen a case of thirty years standing. At first he was hopeful that treatment would prove beneficial, but within two years her condition was unchanged, in spite of continued good health. This was a sister in one of the asylums of the city, and who now lives in South Bend, Ind. One case had recovered in six months. There was considerable heart disturbance, for which he gave digitalis. The man lived in Cumberland, Md., and he had only seen him four times. He was tall, spare and active, with light hair and eyes; and the disease occurred suddenly. Six years after he died of heart disease.

THE PRESIDENT: Would mental worry and anxiety act as exciting causes in production of exophthalmic goitre?

DR. JOHNSTON: Valvular disease of the heart is not present in the beginning of the disease, but is finally produced in those chronic cases in which the heart is subjected to continual strain. In a case reported by Trousseau cirrhosis of the thyroid gland and liver were found; these changes being the ultimate result of long-standing congestion.

DR. MURRAY: It was only a question of time when the heart would become involved. Heart disease usually destroyed life.

DR. BUSEY: In answer to Dr. Bermann's question as to the cause of the disease in his case, said he could not give the cause. She was anæmic, and had been in feeble health for several years. The goitre, however, was not long in developing. As to the noises in the ears, he was aware that they had been mentioned by more than one author; but they were not complained of by his patient. Exophthalmic goitre may exist with or without exophthalmia or heart disease, or one of these phenomena only may exist. The cases differ in degree and symptomatology.

In reply to Dr. Bermann's question he said he did not believe that either strophanthus or digitalis had a cumulative effect; he had been taught that digitalis possessed such quality, but he had never seen it. The dose of strophanthus is susceptible of being increased until six or eight drops are taken every four hours. He had never given strophanthus in large doses. He believed that it was more variable in strength than digitalis.

Various theories as to the cause of exophthalmic goitre have been advanced, but none of them explain it. The theory of its nervous origin came nearer the truth. Sulphuric acid is not unlike ergot in its action. Hanfield Jones considers it a most valuable tonic to the vaso-motor system.

FOREIGN CORRESPONDENCE.

LETTER FROM LONDON.

(FROM OUR OWN CORRESPONDENT.)

The Notification of Infectious Diseases Act—Dr. Jules Simon and the Treatment of Diphtheria—The Pasteur Institute Fund—Hydrochlorate of Pilocarpine in Hystero-Epileptic Attacks—Report of the Royal Commission on Vaccination—Miscellaneous Items.

The Notification of Infectious Diseases Act has now come into operation, compulsorily as regards the metropolis and permissively as regards provincial authorities. Under the provisions of the Act notification must be given, in the case of certain infectious maladies occurring, both by the head of the household (or in his default by various other persons who are enumerated, including finally the occupier of the building), and also by the medical practitioner attending the patient. As the doctor is under a legal compulsion to do his duty in this respect he need not fear that he will give offense to a foolish employer by disclosing family secrets, and moreover, his diligence will be sharpened by the receipt of a small fee from the local authority to whom he makes the formal notification.

Dr. Jules Simon, who has written much on the treatment of diphtheria in young children, has recently visited this country. It appears he is opposed to the use in this disease of mercurials, of chlorate of potash, of borax, of opium and of emetics. The treatment which he advocates is chiefly local and consists of energetic swabbing made every hour with the following solution:

℞.	Salicylic acid.	0.5 to 01 grams.
	Alcohol q. s. to dissolve. .	
	Glycerine	40 "
	Infusion of eucalyptus . .	40 "

The same practitioner also prescribes touching the pseudo-membrane, when very thick and adherent, with a mixture of equal parts of glycerine and perchloride of iron, this application to be made two or three times a day. He also recommends sprays of eucalyptus and of thymol. For nasal diphtheria the application of a mild sulphur

ointment, 1 part to 7, is likewise recommended. To combat the glandular enlargement and engorgement he has the following, well rubbed in:

℞.	Ext. of belladonna.	2 parts.
	Iodide of potassium.	1 "
	Lard.	30 "

The patient's room should be kept at a temperature of 59° F., its atmosphere should be constantly renewed, though it is better that the air from outside should enter through another room, not directly from the open air. The patient Dr. Simon keeps in an aromatic and slightly moist atmosphere, obtained by heating alternately, over a spirit lamp, shallow tin dishes containing tar, and others containing eucalyptus leaves and water. Copaiba and cubebs seem, he says, to have some specific virtue in this disease and are sometimes prescribed by him as adjuvants. If the larynx is invaded by pseudo-membrane, emetics are prepresсribed early, and tracheotomy performed as soon as ever the symptoms of asphyxia show themselves.

A meeting of the Committee of the Pasteur Institute Fund has been held at the Mansion House. The Lord Mayor presided and there were present Sir Henry Roscoe, Professor Fleming, Professor Michael Foster, F.R.S., Mr. Ernest Hart, Professor Ray Lankester and Dr. Armand Ruffer. It was unanimously resolved on the motion of Professor Ray Lankester, seconded by Mr. Ernest Hart, "that the Lord Mayor be requested to transmit to M. Pasteur for the use of the Pasteur Institute the sum of 40,000 f., in grateful recognition of the services rendered by him in the successful treatment of more than 200 British subjects bitten by rabid animals, and that the Lord Mayor be desired at the same time to express to M. Pasteur the high appreciation of the subscribers of the great benefits which he has conferred on science and humanity."

Dr. Samuel B. Lyon reports the case of a married woman æt. 30, in whom the convulsive seizures had the characteristics of hystero-epileptic attacks and who was relieved by a hopodermic injection of ⅛ gr. of hydrochlorate of pilocarpine given over the left ovary. Her temperature, which had been 103.4°, fell to 101.2°. The convulsive movement ceased, consciousness gradually returned and a quiet sleep followed. In this case inhalations of amyl nitrite and ether had only temporarily quieted the spasmodic condition.

The first report of the Royal Commission on Vaccination has just been issued. It contains little else than the minutes of the evidence of four witnesses, Sir John Simon, Dr. W. Ogle, Mr. R. Thorne-Thorne and Dr. Rauch. The Commission began by drawing up a plan of operations which involved the separation of the evidence under six heads. They proposed to begin with the historical and statistical case in favor of vaccination. This will be followed by the arrangement under and administration of the present law, after which inquiry will be made into the case against vaccination and, if continuing to be made compulsory, the reply to those objections and the suggestions of substitutes for the purpose of preventing smallpox. Finally evidence will be taken of suggestions for the improvement of the present law or its administration, with the object of removing objections to vaccination or making it more effective. This programme, when it has been carried out, ought to be conclusive enough to set the disputed points at rest. The report now issued is but a little part of the whole, for the Commissioners say the evidence coming within the first item of their list is not yet ended. So far as it goes, however, there is in that evidence an enormously strong case for vaccination.

At the Pathological Society of London a specimen of non-alcoholic cirrhosis of the liver was shown. The specimen had been taken from the body of a clergyman aged 63, who had been a total abstainer for thirty-seven years. During the last five years of his life he had suffered from repeated attacks of hepatic colic, which lasted for periods of from seven to ten days, and during these attacks he used to pass gall stones and become jaundiced. In the last two years of life the the patient had symptoms of angina pectoris, and six weeks before death ascites appeared. At the post-mortem examination the large arteries were found to be hard and atheromatous, particularly the coronary arteries. The liver, upon inspection, presented the ordinary characteristic of cirrhosis, being hobnailed, hard and pale. The gall-bladder was contracted and bound down to the liver substance by dense adhesions. It contained one large stone and several smaller ones. The liver was infiltrated by a very vascular small-celled growth, which had destroyed the lobules by pressure; the connective tissue was entirely interlobular, the liver cells had not undergone any fatty change, nor was there any abnormal development of pigment. It was generally considered that the irritation of the successive gall-stones and obstruction would be sufficient to account for the development of the fibrous tissue.

An anonymous writer has drawn attention to the value of cocaine as a hæmostatic, and states that for three years past he has given subcutaneous injections of hydrochloride of cocaine to produce local anæsthesia, and noticed that little or no bleeding was occasioned. This led him to use charpie imbibed with a solution of cocaine, namely, hydrochloride of cocaine 1 gram, alcohol 5 drops, cherry laural water 5 grams.

Hyoscine, which is taking the place to some extent of hyoscyamine, when injected at the dose of $\frac{1}{65}$ grain subcutaneously, produces calm and induces sleep in maniacs and sufferers from alcoholic delirium.

Sir Joseph Lister and Dr. Priestly will represent the Edinburgh Medico-Chirurgical Society on the committee of the International Congress of Hygiene and Statistics, London, 1891.

Dr. Lauder Brunton, F.R.S., has arrived at Hyderabad to take part in the chloroform investigation. G. O. M.

NECROLOGY.

Dr. J. K. Bartlett.

Dr. J. K. Bartlett, of Milwaukee, Wis., died at Berkley, Cal., on the 26th of November, 1889, in his 73d year. Born in Portsmouth, N. H., 1816, he entered Yale College in 1834, and graduated from the Medical Department in 1841. In the same year he commenced the practice of his profession among the pioneers of Milwaukee, and remained in active practice for forty-five years. Latterly being the subject of bronchial catarrh and cancer of the lip, in the fall of 1887, he went to California in the hope that a milder climate would benefit his failing health. Some benefit he did derive, but the cancerous affection of the lip made very rapid progress, extending to the tongue and throat the power of speech was lost and death resulted from starvation. The following extract from one of his notes to his attending physician, shows how gladly he counted relief in death: "Weakness is increasing daily, the onward progress towards the dark river appears to hasten, and yet the brink is not in sight. It is well so, for I have some matters to attend to before the plunge." A firm believer in, and a strong advocate of cremation, he directed in his will that his body should be cremated. This was done at Los Angles, Cal., and the ashes sent to Milwaukee for interment in the family burying ground.

To many members of the American Medical Association, he was well and favorably known. For over a quarter of a century he regularly attended the annual meetings, and took an active part in the proceedings. He served as a member of the Executive Council from the time of its creation until declining health caused him to resign; was vice-president in 1872, and chairman of the Section of Obstetrics, at the Cleveland meeting in 1883, when he delivered an able and scholarly address on the "Progress in Obstetrics and Gynecology." His views as to a higher standard of medical education were very advanced; he was a strong supporter of the Code of Ethics, the teachings of which, in his professional life, he carried out both in the spirit and to the letter. To the last he maintained a keen interest in the Association and the profession, was familiar with all the recent literature, not only in English, but also in French and German, with both of which he was familiar. In his own State he was equally active in society work, having been instrumental in organizing, at various times, not less than six different societies, all of which are now obsolete with the exception of the Wisconsin State Medical Society. Of this he was an ex-president, for many years a member of the board of censors, and at the time of his decease an honorary member. On leaving Milwaukee, he presented his medical library to a medical club in that city, which now bears his name.

As a practitioner, he was eminently successful—enjoying the confidence of both fellow-practitioners and patients alike. By the former he was eagerly sought after in consultation, and by the latter regarded as their trusted and esteemed friend. Aside from his professional attainments, his acquaintance with general literature was very extensive, as his miscellaneous library gave evidence of. He was one of the corporate members of the Young Men's Association, now merged in the Public Library, was elected president in 1853, and for many years very active in its behalf, as a member of the board of directors.

The very choicest books which belonged to the Association, were many of them of his personal selection, to which work he gave no small amount of his time and labor from 1851 to 1861. He was fond of music, and had no inconsiderable cultivation in the art, and during an early period of his career he was active in musical circles.

BOOK REVIEWS.

THE MEDICAL NEWS VISITING LIST FOR 1889.

This valuable little work has been thoroughly revised, and brought up to date in every respect. Three styles are published as heretofore. The weekly edition is arranged for thirty patients, the monthly edition for 120 patients, is undated and good for any year. The third, or perpetual edition is also undated, and is good for any year.

The method of arrangement is the best that medical men have been able to devise. In short, every need of the physician seems to be anticipated in this last revision of *The Medical News Visiting List.* Each style is in one volume, bound in handsome red leather, with pocket and pencil. Price $1.25.

THE STORY OF THE BACTERIA AND THEIR RELATIONS TO HEALTH AND DISEASE. By T. MITCHELL PRUDDEN, M.D. 16mo, cloth; pp. 143. New York and London: G. P. Putnam's Sons. 1889.

As may readily be conjectured from the title, this is a book which approaches the border line between science and general literature; indeed, it

really steps over a little way into the territory of the latter, where it will doubtless have a good reception, such as it deserves. One can scarcely imagine a technical, scientific subject treated in a more delightfully interesting manner than this one has been. Dr. Prudden certainly has the faculty of making science racy for non-scientific readers. Although this little book is evidently designed for popular reading, it will be found to be replete with interest for the average medical reader as well.

AN EXPERIMENTAL STUDY IN THE DOMAIN OF HYPNOTISM. By DR. R. VON KRAFFT-EBING, Prof. Psychiatry, University of Graz. Translated from the German by CHAS. G. CRADDOCK, M.D., Assist. Phys. Northern Michigan Asylum. Pp. viii, 129. New York and London: G. P. Putnam's Sons. 1889.

By those who are interested in the subject of hypnotism, a subject, indeed, whose claims to practical importance are being more and more pressed upon the medical profession, this contribution will doubtless be read with attention. It is occupied entirely with an account of a large number of extraordinary experiments performed upon a young Hungarian woman who was unusually susceptible to psychological influences. To the author's mind they afford abundant proof of the correctness of the view that hypnotism does not depend upon so-called animal magnetism, but upon a psychical (moral) influence exercised by the experimenter over the subject. The author congratulates the profession that so important a subject as hypnotism has been taken from the hands of charlatans to be developed by scientific inquiry until it has come to occupy a conspicuous place in the domain of science.

ORIGINAL INVESTIGATIONS OF CATTLE DISEASES IN NEBRASKA—1886–1888. By FRANK S. BILLINGS, while Director of the Patho-Biological Laboratory of the State University of Nebraska. Pp. 280. Lincoln, Neb.: State Journal Co., Printers. 1889.

This volume contains articles on "The Southern Cattle Plague and Yellow Fever," in which the author describes some points of resemblance between the two diseases; an article on "The Corn Stalk Disease;" an article on "The So-called Hydrophobia in Cattle;" an article on "Contagious Inflammation of the Cornea in Cattle;" and an article on "A Singular Disease of the Sexual Organs in Cows."

Dr. Billings' labors are too well known and appreciated both at home and abroad to make any extended description of the character of his work necessary. It is sufficient to say that an immense amount of original investigation is embodied in his publications, all of which bear the stamp of the enthusiastic observer. The present volume contains a number of excellent colored plates illustrative of pathological and bacteriological features of the diseases considered.

In a final note Dr. Billings alludes to the closing of his work in connection with the State University of Nebraska. It is understood that he has taken up his permanent residence in Chicago, where it is hoped that he will find abundant means of continuing investigations which have proved so valuable to the stock-raising interests of this country.

MISCELLANY.

THE PARIS AWARD.—Among the thousands of exhibitors who have made a display of their wares at the Paris Exposition this year, less than one-half received any award; the remainder received honorable mention, bronze, silver and gold medals, but to a very limited number was the Grand Prize awarded. The Grand Prize was awarded to Nestlé's Milk Food. This is the second occasion on which this great distinction has been conferred on Nestlé's Milk Food.

LETTERS RECEIVED.

Dr. G. H. Simmons, Lincoln, Neb.; E. B. Treat, New York; Dr. W. H. Delong, Pikesville, Pa.; J. H. Bates, New York; Dr. Will. Jennings, Richmond, Ky.; Dr. F. R. Van Kirk, McKeesport, Pa.; Dr. H. F. M. Nary, Princeton, Ky.; D. B. Lefever, Ephrata, Pa.; Dr. F. H. Long, Madison, Neb.; Dr. D. C. Patterson, Washington, D. C.; Dr. G. A. Brodie, Claremount, Ont., Can.; Dr. R. J. Dunglison, Dr. De F. Willard, Philadelphia; Dr. N. White, Chicago; Dr. Samuel S. Adams, Washington, D. C.; Dr. W. W. Jaggard, Chicago; Thos. Leeming & Co., New York; P. Blakiston & Co., Philadelphia; Dr. W. T. Dougan, Vandalia, Mich.; Dr. P. Hooper, William R. Warner & Co., Philadelphia; Dr. A. F. Walter, Gladbrook, Ia.; Dr. Austin Flint, New York; A. H. Roffe & Co., Boston; Long Island College Hospital, Brooklyn, N. Y.; T. W. Hannaford, London, Eng.; Dr. J. E. Clark, Detroit, Mich.; Trübner & Co., London, Eng.; Dr. L. Turnbull, Philadelphia; Dr. A. Holton, Harker's Corner, Ill.; Dr. Wolfred Nelson, New York; Dr. C. A. Foulke, Argentine, Kan.; Dr. Daniel LaPerte, Detroit, Mich.; Journal of Cutaneous and Genito-Urinary Diseases, New York; Dr. D. C. Newman, Pasadena, Cal.; Dr. Frances E. White, Philadelphia; Dr. A. J. Simontof, Spokane Falls, Wash.; Dr. Charles B. Petrie, Mound City, Ill.

Official List of Changes in the Stations and Duties of Officers Serving in the Medical Department, U. S. Army, from November 23, 1889, to November 29, 1889.

By direction of the Secretary of War, the extension of leave of absence granted Capt. Valery Havard, Asst. Surgeon, in S. O. 240, October 15, 1889, from this office, is further extended one month. Par. 1, S. O. 272, A. G. O., November 21, 1889.

Official List of Changes in the Medical Corps of the U. S. Navy for the Week Ending November 30, 1889.

Medical Director F. M. Gunnell, placed on the retired list. November 27, 1889.

Surgeon J. H. Gaines, ordered to duty at Army and Navy Hospital, Hot Springs, Ark.